An Address
ON
THE MEDICAL PROFESSION: ITS PLACE AND PROGRESS.

Delivered before the North London Medical and Chirurgical Society on April 11th, 1895.

BY JAMES GREY GLOVER, M.D. EDIN., &c.,

PRESIDENT OF THE NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY; VICE-PRESIDENT OF THE CLINICAL SOCIETY; DIRECT REPRESENTATIVE OF THE PROFESSION IN THE GENERAL MEDICAL COUNCIL, ETC.

GENTLEMEN,—You will not expect from me an address comparable to those with which we have been favoured many times in the short history of this society—not least in the course of the session now drawing to a close—from men of eminence in the consulting ranks of the profession or in those regions of pathological and biological research whose work makes the last part of the nineteenth century memorable in the history of medicine and of Queen Victoria. Mine will be the humbler function of reviewing from the standpoint of a general practitioner the ground we occupy as a profession; of noting the principal changes I have seen in practice and estimating their importance, and possibly of forecasting the lines of probable development and progress of medicine. There are some who take a gloomy view of the future of the general practitioner, who think that between the consultant and the specialist, backed by the hospital system, not free, it is admitted, from great abuses, he is likely to be extinguished, or at the very best relegated into a position entirely secondary and subordinate, similar to that of the old apothecary. It is curious to notice, in contrast to this, an opposite set of fears which, it is said, occur occasionally to the consultant class. I have heard it said that consulting surgeons are concerned at the growth of surgical aptitude among their pupils, and at the boldness with which they undertake feats of surgery, the only consolation being the occasional scrape in which these audacious young gentlemen land themselves, for escape from which they have to appeal to their superiors. It is always dangerous, however, to prophesy the future of any great branch of medical work. I lately heard on the best authority a very striking illustration of this, and as I have the kind permission of those principally concerned to mention it I gladly use it. It has reference to a period seventy years back, and to a then young physician who afterwards became distinguished—I mean Dr., afterwards Sir George, Burrows. My informant is Mr. Willett, son-in-law of Sir George Burrows. When it was determined that Dr. George Burrows, having graduated in Cambridge, should commence practice in London as a physician, Sir William Lawrence called on Dr. Burrows's father, Dr. Mann Burrows, to induce him to dissuade his son from starting as a physician in London—i.e., as a hospital and consulting physician—because in his (Sir William Lawrence's) opinion physicians would soon cease to exist through there being no demand for them in London, adding that if the son were determined to be a physician he might succeed in Manchester or some other large provincial town or centre. Those who remember Sir Wm. Lawrence will best know how striking this illustration is. He was one of the acutest of men and the most far-seeing. Yet nothing can be further from the fact than his forecast. Sir George Burrows lived to be one of the most successful and eminent physicians of London; the number of consultant physicians has been largely multiplied, and so has their success, and if there has been any difference the movement has certainly been from the provinces to the metropolis rather than from the metropolis to the provinces. Such extreme views as I have quoted correct each other, and we may conclude that, the great social conditions of life remaining the same, and the great wants of human nature in a medical respect being subject to but little variation, there is likely to be the same steady demand for medical service and its different forms and grades as exists now, and that it will depend very much on the profession itself how far it will be consulted and on what terms. Certainly, there seems no reason at present, despite the growth of specialism, to think that the general practitioner will cease to be much needed in the economy of things. The facilities for special study in medical education are being multiplied in every medical school of any consequence, and it will be the fault of the medical student if on finding himself a practitioner he has not a knowledge of the elements of all the specialisms, which it has never been so easy to gain before. Before leaving this subject I wish to say a word on the great importance in the curriculum of medical education of a certain amount of pupilage in general practice. Some of us have been partially successful in the General Medical Council in getting this truth recognised: I am pleased to add, with the concurrence of such leaders as Sir Wm. Gull, Dr. Wilks, Sir James Paget, and others. Just as men need to have lessons in hospital practice, so they need lessons in general practice. The practice is quite different. The very cases are different, and their management and even treatment are different. But especially the cases are different. The great bulk of the cases that constitute general practice are conspicuous by their absence in the wards of a hospital and would be considered uninteresting, so that it is possible for a distinguished student, and even one who may have been a resident physician and surgeon, on commencing general practice, to find himself in considerable difficulties alike of diagnosis and of treatment. One great enemy of the general practitioner, and especially of the young general practitioner, is not so much the specialist as the generalist—that arch-generalist, the prescribing chemist—with his ready platitudes of diagnosis and his equally ready remedies for every complaint, from that of the teething infant to that of the ailing woman or man on whose health the happiness of a whole family depends. I sincerely believe that one of the best ways of meeting this unfair competition is the education of the medical student in common diseases—in the perception of their importance and in a readiness to recognise and relieve them. The tendency is rather to make light of them. This tendency should be denounced. A child with a distended tooth sac is not to be relegated to chemists. It is on the verge of convulsions or diarrhœa or bronchitis, and is not to be put off with a powder or a diarrhœa mixture. The profession must keep in touch with the common diseases of the common people or it will hand over whole branches of practice to the druggist, and we shall hear more of the hardness and the decline of general practice. I magnify the office of the general practitioner in his responsibility for the treatment of ordinary cases, believing with Sydenham, who said:—"Nevertheless I have always thought it a greater happiness to discover a certain method of curing even the slightest disease than to accumulate even the largest fortune, and whoever compasses the former I esteem not only happier but better and wiser too. With respect to practice I declare that I have faithfully set down all particulars ..... also that I have contributed to the utmost of my abilities that the cure of diseases might, if possible, be prosecuted with greater certainty after my decease, being of opinion that any accession to this kind of knowledge, though it should teach nothing more pompous than the cure of the toothache or corns, is of much greater value than all the vain parade of refinements in theory and a knowledge of trifles, which are perhaps of as little service to a physician in removing diseases as skill in music is to an architect in building." But, though I think strongly that the success of the profession is largely dependent on its familiarity with the common diseases of the people and on sympathetic readiness in the use of means for their relief—in other words on the efficiency, sympathy, and accessibility of the general practitioner—I am under no delusions as to the abolition of the higher branches of professional work. No man recognises more cheerfully than I do the increasing earnestness and authority of consultants and their value in the economy of things. The most experienced general practitioner best knows the comfort and the satisfaction of calling to his aid men, whether young or old, whose studies, or genius, or experience, or practice in the various parts of our vast empire, have added to our knowledge of disease, or whose skill in the treatment of difficult cases has been recognised alike by the public and the profession. It would be strange indeed, and as discreditable as strange, if in a wealthy nation and with a social life ever becoming more complicated and exacting, the necessities for such authoritative members of the profession did not multiply and if their rewards did not increase. I am tempted here to quote Mr. Gladstone, speaking in 1890 at Guy's Hospital of the great start taken by the profession in the last century in the

time of Freind and Mead: "That profession has been steadily rising in power, in influence, and in general respect from that date to this, and it is my belief it will continue to rise. The growth of civilisation, as we call it in a large and comprehensive, but in a very loose and indefinite phrase, carries with it the production of many new forms of infirmities and disease, and men's wants in the medical sphere are the opportunities of the medical man." Lord Salisbury has spoken, too, within a year or two in very important terms of the profession and its work. It was on the same occasion at Guy's Hospital that Mr. Gladstone made two remarks on the financial aspects of our calling that deserve our attention. He referred with satisfaction to the great professional fortunes that were accruing to medicine, and secondly he complimented us on our independence, and said there was no great profession which had dipped its hand so modestly and moderately into the public purse. So far so good, but Mr. Gladstone's friendly remarks need this reply: The great medical fortunes might be counted on one's fingers or even one's thumbs, and have not kept pace with the growth of national wealth. If a statement could be got of the average net income of the profession it would surprise our financiers who tax us so complacently. Secondly, I shall have to show in a few minutes that if the profession has kept its hands out of the public purse more than other professions, it has done an enormous amount of unpaid or ill-paid work for the poor, and has been allowed to do it in a way scarcely creditable to the State or to the public.

So much for the ground we occupy as a profession in its two main divisions of the general and the consulting practitioners. There need be no jealousy between them, and there should be no rivalry. They should help each other and sympathise with each other, and respect each other's functions. Neither of them singly is equal to the whole care and cure of disease. They should coöperate; and I know no place for bringing them to a better understanding of each other and of disease than such societies as that of which we are members. Here they can each make their own special contribution to the illustration of disease and stimulate one another to a deeper study of it; and if there is any root of bitterness or element of friction amongst us, this is the kind of place for its full and friendly discussion. I know that our larger societies have not been so used. Perhaps, rightly so; but I am disposed to think that this exclusion of all medical ethics and politics from the societies has been carried a little too far. No one would regret more than I should the distraction of our scientific societies by frivolous or petty questions of medical or ethical politics; but there are some such questions which are neither petty nor frivolous, which involve the very reputation and efficiency of the profession, and on these, I think, our medical societies, *because they are in the main scientific societies*, might occasionally confer with advantage to the harmony and solidarity of the profession. For want of such conferences between the consulting and general branches of the profession one is pained occasionally to see indications of a want of sympathy between these branches, as if their interests were different.

Any review of the place and progress of the profession since I have known it would be very incomplete which did not take note of the enormous development of medical work done in the way of preventing disease. The State under the lead of such men as Mr. Chadwick and Sir John Simon has come to see that disease is an immense factor in the retardation of the progress of society, and that it is largely preventable. In a time when the notion of personal liberty in all directions grows almost excessively, there is one direction in which it is being discouraged and denied—that is, the liberty to have avoidable disease, to live in an insanitary house, or to generate smoke or other nuisance that may be injurious either to one's self or to one's neighbours. The subject of certain avoidable or communicable diseases is no longer a free agent or master of his own house. His illness is a matter of public importance and must be communicated to the public authorities. The chief agent in this communication is the medical practitioner. In a large proportion of the cases the patient is taken or voluntarily goes to public institutions to be treated gratuitously by medical officers appointed by the State or by a Board created by law. In my younger days the only public medical officers were the parish doctor and the medical officer of the workhouse. Now, one of the most important factors in a parish is the Medical Officer of Health, who, through his "authority," has enormous powers over property and over the liberty of individuals. A question was put in Parliament the other night by the members for Islington which implied not only the power but the duty of the State in such institutions to practically incarcerate a patient with scarlet fever if need be for the best part of 100 days. Such duties and such relations of the medical profession immensely increase its importance and its responsibility. It needs in its facts to be unimpeachable and in its judgment to be impartial. While other professions are rather losing touch with the State, are threatened, in the language of the day, with "disestablishment," ours seems to be undergoing a sort of opposite process. So bent is the State on the prevention of disease—so properly bent—that the very material of our work is lessened by its operations. The profession is supposed to be the great mainstay of the Vaccination Laws, and by some foolish people to be so on selfish grounds. "Of course we approve the Vaccination Laws because we like the vaccination fees"; so runs the argument, forgetful that the vaccination fees are very small, and that a good long illness of six weeks would be much more profitable to the profession. It is certain that either for the prevention of disease or its cure the State will not on this side of the millennium be independent of the medical profession. It is sad to think that so far it is poorly paid; that its most illustrious members are but slightly regarded by the State and conspicuous by their absence in her great councils. But this will not always be so. We are, after all, the most indispensable of the professions, and if we were only true to each other we could compel very different recognition both from the public and from the State. The medical officers of the Services have often set their civil brethren an example in this respect, of a little more dignity and unanimity of demand, and the sooner we follow the example the better. The profession has long accounts to settle with the public and with the State. In its way—a really shabby way—the State has made medical provision for actual paupers; but *pauperism* is going out of fashion. We no longer speak of pauperism, but of poverty. This difference is accentuated in the case of all medical relief, so that the State has called on its medical officers to give relief to citizens to whom it would give no other relief, and who are to lose no right of citizenship by accepting it, but who would lose such right by accepting other forms of relief. What is the meaning of this exceptional position of medicine unless it be that it is indispensable This is a cheap way on the part of the State of using its medical officers for those who are not veritable paupers. The public in its philanthropic capacity does very much the same thing. It allows the medical profession to do its medical charity. There is a huge population so poor or so improvident as to have no regular understanding with a medical man, but who rush to him in emergencies and who ring his bell urgently at midnight when all other good citizens are fast asleep, and expect to be attended to on grounds of humanity. I agree that there is something so pitiful in the emergencies of disease that this is almost inevitable; but I am amazed that the public or the State has so long left all this work to be done by anybody or anyhow without thought of its own responsibility to the profession which does it. I will give you an example of what I mean, not inapt at this time, when the question of midwives is before the public and the profession. I was asked to see a poor but respectable woman with seven children, lately confined. She had been delivered by a midwife, who had to call a medical man out of his bed to remove an adherent placenta, which he did efficiently. The woman was much blanched, besides being the subject of chronic phthisis. I found, only by categorical inquiry, that while the midwife had her 10*s.* 6*d.* fee, the medical man had had no fee for his obstetric services, and apparently expected none. Has society, has the State, no duties towards the medical man who does the good Samaritan in this way? Is the public for ever to have all this medical charity done vicariously? We shall see. Now that the decent poor are to be helped without taint of pauperism the scandal of medical charity at the expense of the medical profession alone must be removed.

I have left myself so little time that I must say but a few words on the principal changes which I have seen in practice and their significance, without any severity of arrangement or any pretension to exhaust the subject. I think the following headings would include the chief facts: 1. The introduction of anæsthesia. 2. The disappearance of the antiphlogistic treatment of disease and the introduction of one which aims at supporting the powers of nature, by which it is recognised that disease is chiefly combated. 3. The doctrine of sepsis and the application of antiseptics in

surgery, medicine, and midwifery. 4. Increased care in the study of the *causes* of disease and the discovery in many diseases of the bacteriological nature of their cause. 5. Increased care and time in the *diagnosis* of cases, especially in the determination of the element of pyrexia by the use of the clinical thermometer, in the use of bacteriology, &c. 6. In Midwifery the shortening of the second stage of labour by the more common and early use of the forceps and the improved treatment of placenta prævia, and, above all, the protection of the lying-in woman from all contamination with specific contagia by extreme cleanliness, their careful exclusion, and the use of antiseptics. 7. The recognition of the relation of great groups of disease to an underlying and often inherited diathesis or constitution. 8. The enlargement of our conception of therapeutics as embracing much besides mere drugs; a more open mind for new remedies, with unabated respect for old ones; more or less successful attempts at theories of the mode of action of drugs. Each one of these headings would be worth a separate address by a capable speaker. I am only giving you the impressions made on a general practitioner who has had neither the time nor the ability to go deeply into the questions which they cover. Looked at cursorily and in their combination they show a broadening and strengthening of the very basis of medical science and an enormous addition to the beneficial and curative powers of the profession. The first change I have noticed is Anæsthesia. This discovery alone would have conferred lustre on the history of medicine in this century, but it is too obvious and too big a fact for more than mere mention here. I notice next the Disappearance of the Antiphlogistic System. There can be no doubt that this is a great improvement. Though it is doubtless true that there are cases which would be mechanically relieved by a moderate and careful phlebotomy, it must still be admitted that the old practice, which added the complication of anæmia to every acute disease and not a few chronic ones, was one of those errors which can only be regarded as the result of the undue reign of mere authority and imitation. As to the theory of change of type of disease by which this change of practice was sought to be covered and explained, I have a very limited belief in it. The ordinary acute pneumonia, which, occurring in a single member of a family and going through the typical stages made familiar to us by Bennett, Fox, and other writers, is very much the same thing as I used to see as a youth. I am aware that this ordinary pneumonia is considered by many physicians as "an infectious disease" depending on a micro-organism invariably found in the diseased lung. But surely there is another pneumonia abroad which, if not new or newly recognised, has been recognised with fresh vividness, with its qualities of asthenia and of infectiousness, which place it altogether in a separate category. I would especially refer in this connexion to the report of our distinguished neighbour, Dr. Ballard, on the epidemic of pneumonia in Middlesbrough in 1888, which affected 1633 persons out of a population of 97,606 and caused 369 deaths, or 16·7 per cent., which he called a specific fever, like which (specific fevers) it possessed the quality of communicability from the sick to the healthy, either immediately through proximity, or mediately through food or otherwise. "It has seemingly," he adds, "its own specific *contagium vivum*, 'the bacillus pneumoniæ' of Klein, which he has captured, isolated, and studied"; with which, by inoculation or in the way of food, he produced a similar fatal pneumonia in mice and guinea-pigs. I have myself known three deaths from pneumonia of adults within as many weeks in a country house with every comfort and luxury in it. I make the less excuse for allusion to this epidemic as it has had too much interest for us in recent influenzal seasons, and because its investigation by Dr. Ballard on behalf of the Local Government Board is one of the best illustrations of the thorough and deep investigation of the nature of disease which contributes the best basis for means for its prevention and treatment. I will not detain you in any laboured vindication of the value of the sustaining and restorative treatment of disease as compared with the antiphlogistic; but I will only add my belief that this theory is occasionally pushed too far, especially in the old, and that both stimulants and food are stuffed down the patient's throat in a mechanical sort of way, to his embarrassment rather than his advantage, as if he were a cask for the passive reception of such things, and not an organism with digestion and every other function in abeyance. We have to remember that food and nourishment are only good in as far as they can be appropriated and assimilated—that all beyond this creates discomfort and difficulty for the loaded and disordered organs. The Antiseptic system needs no laudation from me who have no claim even to praise it save that of one who early discerned its significance, and has looked with ever-increasing admiration on its success. It has revolutionised surgery, and seems to me the greatest improvement since the discovery of the ligature by Ambrose Parè. It is impossible for those who did not live in pre-antiseptic days to know the difference in surgery. The finest surgery was marred by the frequent appearance of septicæmia in a few days from the operation, and when this did not happen the wound or the compound fracture was often the seat of a suppuration that yielded pints of matter, and not infrequently a lively brood of living and by no means microscopical animals—which stank and poisoned other patients in turn. Three words will express for all time the chief achievement of Sir Joseph Lister: "He abolished pus." And if the achievement seems at first sight somewhat less than that of Parè, as the loss of pus is less terrible than the loss of blood, yet in other respects the merit is greater, as the intellectual process by which the system was established was more subtle and profound. In its application to midwifery and gynæcology the Antiseptic principle has been unspeakably beneficial, and has saved and is destined to save thousands of lives. It has especially rescued lying-in hospitals from a discredit which threatened their extinction. It is only fair to say that Semmelweis in 1847 in a way anticipated the antiseptic system in the matter of midwifery, but only in a way. Be this as it may, we owe to the system introduced so ploddingly, through evil report and good report, by Sir Joseph Lister an extension of operative surgery undreamt of before his day and a success of it which is simply brilliant, and which brings it into serious competition with medicine in many fields hitherto regarded as the exclusive domain of the physician. I must here emphasise the two great achievements of recent midwifery proper which, *after the antiseptic system*, strike me as its greatest improvements. The first is the freer and earlier use of the forceps, shortening the duration of the second stage of labour, which, as Sir James Simpson showed, had much to do with the complications and disasters of the after puerperal condition. True we have heard much more of late years of accidents to the perineum. But these have been carefully and antiseptically dealt with. I may mention one little precaution of my own which I have found effective for the prevention of such accidents, which is, of course, better than the most scientific suturing—viz, when you use forceps to procure the aid, where possible, of a brother practitioner to take charge of the perineum. This is a very simple precaution and in out-of-the-way places perhaps an impracticable one. But I can commend it from experience. The next great achievement of midwifery is the improved treatment of Placenta Prævia, by which the patient, after the nature of the case is clear, is practically not left till delivery is accomplished. It is gratifying to think that this improvement is most honourably associated with the names of British obstetricians, notably Dr. Barnes, Dr. Braxton Hicks, and Dr. Murphy of Sunderland. The last physician has published a record of sixty-three cases with only two deaths, and in one of these the patient was moribund when first seen. My fourth point is the improved care and means in Diagnosis especially—e.g., in the determination of the question of pyrexia, or otherwise, by the use of the clinical thermometer, in the application of bacteriology, and, I would add, the closer and more practical study of physiology in its bearing on the problems of health and disease. I need not detain you with illustrations of this proposition. I have only met with one member of the profession who did not use a clinical thermometer, though I have known many, including myself, who use it too infrequently. I am persuaded that no instrument does so much to put us on our guard and to save us from grave neglect of diagnosis; for after all many of our errors come from carelessness and off-handedness. Having once ascertained the existence of pyrexia, we are on the safe road to find out its significance in the particular case. Of course, the mere absence of pyrexia is no guide in a large proportion of our graver cases. It would be presumptuous in me to enlarge on the part played and to be played by Bacteriology in diagnosis. We seem to be at the mere threshold of a new region of light. But already which of us is not indebted to it for aid? I am sorry that a resolution in the General Medical Council, moved by Dr. Philipson and seconded by myself, for securing more attention to this subject in medical education was lost. Of course, this was from no inadequate sense of the subject

in the minds of the members of the Council, but from their assuming that it will be taught. Meantime most busy practitioners will be thankful to be members of the Clinical Research Association, which quickly determines for us the bacteriological or other facts of any given secretion. It is no slight proof of the increased carefulness of practitioners, that in six months this association has examined 2000 specimens sent from various parts of the country. It is only fair to medical teachers to say that physiology and all other fundamental subjects are now taught in a practical way with a view to their bearing on the great problems of health and disease.

I have not left myself time to speak of the changes to be noted in larger conceptions of therapeutics and more accurate views as to the action of medicines. Though mere drugs are no longer regarded as the be-all and end-all of the practitioner, they were never more indispensable than now. The discovery, for example, of Laveran's bodies—the essential cause of ague and so admirably illustrated lately for this society and for the profession by Dr. Patrick Manson—has not superseded the use of quinine. Rather has it afforded fresh demonstration of its power, for it is found to destroy these very bodies and cause their disappearance from the blood. How real and persistent is the reputation of our old remedies—quinine, mercury, opium, alkalies, and iodide of potassium; but how much our store of remedies has been enriched by the addition of the bromides, salicin and its compounds, antipyrin, phenacetine, pilocarpine, iodoform, nitrite of amyl, nitro-glycerine, boric acid, &c. We are deluged, indeed, with new medicines, and they come to us in quantities which are embarrassing. Still, truth compels us to admit that they come in pharmaceutical forms which are a great improvement on old ones. The admirable preparations of active drugs for hypodermic use enable one to carry a medicine-chest in the pocket of our coat, and to minister to urgent symptoms when medicine in ordinary forms administered by the mouth would be rejected. The wonders wrought by thyroid feeding—of which a happy instance was recorded at our last meeting by Mr. King—are a revelation. It is perhaps premature to speak dogmatically of the treatment of diphtheria by antitoxin; but it is significant to notice the lower range of mortality from diphtheria in the metropolis since its introduction, and we have good reason to hope that a new realm of therapeutics has been sighted. Very remarkable, too, are the results of alimentation and massage in properly selected cases, and of the action of natural waters to be found in our own and other countries. The direct introduction of antiseptics into the trachea and bronchi in cases of phthisis and other forms of chest disease has been lately shown by Mr. Colin Campbell and others to be both practicable and beneficial. Speaking generally we have outlived the idea that disease is to be treated by drugs alone. But we are no nearer the time when they can be dispensed with or administered in impalpable quantities without injustice to our patients and unfaithfulness to our art. The forecast from such achievements as I have summarised I shall leave to my audience. The subject is tempting, but your time is gone, and I must bring my address to a close. I cannot do so without a word of gratitude to my colleagues generally and the secretaries, who have so well piloted the society through a session of some anxiety and difficulty, and have provided us with admirable material for professional instruction and reflection. I can imagine nothing better for a man in general practice than to be a member of such a society as this, if not of more than one. By contact with fellow practitioners and by seeing constantly a number of interesting cases he keeps his knowledge of disease and its remedies fresh. Differences of opinion are adjusted, and where that cannot be men still learn to respect each other and each other's views. Let us do what we can to promote these great ends of all medical societies and in every other way to advance the harmony, the reputation, and the usefulness of the profession of which we all feel it an honour to be members.

FOREIGN UNIVERSITY INTELLIGENCE.—*Berlin:* Dr. R. Langerhans, *privat docent* in Pathological Anatomy, has been granted the title of Professor.—*Giessen:* Dr. Sommer of Würzburg has been appointed Extraordinary Professor of Mental Diseases.—*Turieff (Dorpat):* Dr. Bubnoff of Moscow has been appointed Professor of Hygiene; Dr. Ignatovski of Kieff has been appointed to the Professorship of Forensic Medicine.—*Strasburg:* Dr. Cahn has been promoted to an Extraordinary Professorship of Medicine.

The Lumleian Lectures
ON
THE DIAGNOSIS, PROGNOSIS, AND PROPHYLAXIS OF INSANITY.

Delivered before the Royal College of Physicians of London on March 28th and April 2nd and 4th, 1895,

BY G. FIELDING BLANDFORD, M.A., M.D. OXON., F.R.C.P. LOND.,
LECTURER ON PSYCHOLOGICAL MEDICINE, ST. GEORGE'S HOSPITAL.

LECTURE III.[1]

Delivered on April 4th.

THE PROPHYLAXIS OF INSANITY.

MR. PRESIDENT AND GENTLEMEN,—I come now to the third portion of my subject—the prevention of insanity. On Jan. 1st, 1894, there were registered as of unsound mind, according to the Report of the Commissioners in Lunacy, 92,067 people in England and Wales alone. How many more there were unregistered no one can tell. That it is a large number is certain. That it will increase and is increasing I think there can be no doubt; for the public in general resents and resists the new and cumbrous Lunacy Law to the utmost of its power, and will continue to do so. The consequence is that patients are treated at home and are not registered, and the early treatment, which is admitted by all to be essential to recovery, is but rarely adopted. A controversy exists, and has existed for many years, as to whether insanity is increasing or not. We read in the Commissioners' Report that the number of registered lunatics and idiots in 1894 exceeded that of 1893 by 2245; but this, we are told, can be easily explained, and is no proof that insanity is increasing. My own belief is that we can deduce but little from such figures. If insanity does not increase it is to be inferred that the recovery-rate and the death-rate must decrease to account for this large accumulation of cases. I have nowhere seen any statement that insanity is decreasing, or that nervous disease is diminishing in frequency or intensity; and *a priori* reasoning would lead us to think that the reverse is the case—that the environment in which we live is becoming more and more complex, and that there must be a corresponding complexity of brain centres and functions with more and more instability and liability to disorder and deterioration. I know that this view has been called pessimistic, and that there are some whose opinions I greatly value who deny that there is any increase of complexity, and who point to brilliant men who live and are well in spite of hard brainwork. This does not, in my opinion, disprove my position, but only shows that the strong and the naturally selected escape the dangers which overwhelm the weak, who by natural inheritance and less fortunate environment succumb to nervous disorder. I shall come back to this part of my subject presently, when I speak of the rearing and training of those who are threatened with nerve or mind trouble. I wish first to say something about the great cause of insanity—hereditary taint. There is no need for me to argue before an audience like this upon the existence of such a cause of insanity or to raise any question as to the transmission of the disease by inheritance. Few medical men, even of those whose practice does not lie amongst the insane, can pass many years without its being brought under their notice. Young persons of both sexes break down, we know not why. The parents may assign this or that as a reason, but they are keeping back the true cause. The patients are too young to have acquired insanity; they have not been exposed to the changes and chances of life; they have not known the cares and anxieties of poverty and the condition of those who have to support a family on very small means; they have not failed in business or been disappointed in their ambition; they have not taken to drinking; their insanity is idiopathic, constitutional—derived from their forefathers; and insanity is inherited not only from insane parents, it may come from those who are afflicted with other nerve disorders, as epilepsy or dipsomania, and along with insanity we find in a family the disorders which I have

[1] Lectures I. and II. appeared in THE LANCET of April 6th and 13th respectively.

named and all the series of neuroses with which you are familiar. But statistics of inherited insanity we do not possess. Statistics of cancer, statistics of phthisis, two other hereditary diseases, we are able to arrive at and to argue upon. The reason of this is that cancer and phthisis kill their victims, and the record appears in the Registrar-General's list of deaths. But insanity does not kill except in a few cases. People become insane and may live for years in this condition, dying eventually from some other disease, which is tabulated as the cause of death. Two patients have lately died under my care. One, a woman, had been in the same asylum for fifty years. She died from an apoplectic seizure; the other, a man, had been forty-one years in the asylum and died from prostatic and bladder trouble. Not deriving any assistance from the Registrar-General, we are driven to the information we get from the relatives of patients and our own knowledge and observation. The former—the facts imparted by friends—are absolutely untrustworthy. That insanity exists in a family is denied with the most unblushing boldness. I recollect the case of a gentleman who was about to be married. The relatives of his intended heard in some way or other that his family was not altogether free from this disease, and they put some plain questions, not to him, but to his relatives. They were told in the most positive terms that nothing of the kind existed, though at the very time the gentleman was the committee of an insane aunt, and other suspicious cases had occurred. The marriage took place. Within six weeks the gentleman was in a foreign asylum. He recovered, again to break down, and after a series of recurring attacks he died in an asylum in three or four years a hopeless epileptic. Fortunately there was no issue of the union.

Mr. Francis Galton, who has, as you know, studied the question of heredity, tells us in his book on "Natural Inheritance" that when he issued his inquiries as to the "Records of Family Faculties" insanity was not asked about, as he did not think it wise to put too many disagreeable questions. No doubt he thought that the answers he was likely to receive on this point were not likely to add much to our knowledge. Without information, and accurate information, we can do little by dint of our own observation. There are but few of us who have the opportunity of observing many families through three or more generations. Here and there we come across certain insane persons in a family, and may be aware that in the preceding or following generation there have been others. But for the purposes of our investigation we want to know not merely these black spots and blights in the family tree, but the history of all the others, the half insane, the neurotic, the phthisical, the healthy. Is the family tending to decay and extinction, or is it reviving, throwing off its unhealthy branches, and with recuperated vigour ascending again to its proper racial place? We want to know the conditions of the one or the other of these terminations. Doubtless the environment has a good deal to do with the result, but inheritance has as much or more, and this is a matter more under the control of the interested parties if they will only suffer themselves to be controlled by our advice.

We may roughly divide insanity into that which is inherited and that which is acquired; but no one cause of acquired insanity at all equals heredity as a producer of mental disease. If we could stamp out all the insanity which owes its origin to inherited instability we should have gone a long way towards the extirpation of insanity as a whole, for a great deal of the mental breakdown which is apparently acquired is due to hereditary weakness. A large amount may be acquired through alcoholic indulgence; but if we closely examine the cases where alcohol is the exciting cause, in how many we find hereditary predisposition. Sometimes the alcoholic craving is inherited or it may come from ancestors who were not themselves inebriates, but showed some other form of mental or neurotic disease. Again, look at the insanity which is due to overwork or worry, to shock, disappointment, or religious excitement. Some such exciting cause may be found in many cases, but behind it we may perceive a predisposing cause, hereditary taint. How many a patient who is said to have suffered from worry has evolved his worry out of his own nervous, fidgety constitution. The things which are worries to him would be nothing to a more stable mind. And the same with work. What is healthy occupation to one becomes a burden too heavy to be borne by another who collapses under its weight. The same with losses and shocks and with religious strain. If we wish to save our race from gradual mental decay, and not only to preserve life from such ills as zymotic diseases but to raise up a strong and vigorous breed of healthy men and women, it is absolutely necessary that more attention shall be paid than has been done hitherto to the selection of the individuals who are about to marry and reproduce.

If men and women were racehorses or shorthorns or greyhounds their breeding would be regulated, and all diseased or faulty stock would be carefully eliminated, and all in-breeding would be, as a matter of course, avoided. But being what we are, thinking only of ourselves and our own self-gratification and nothing of the future race, we arrange our own unions, and nobody has the right or the power or the courage to prevent us when we have attained to years of discretion—viz., the statutory age of twenty-one. Many have thought and more have hoped that some day legislation may concern itself with this subject and prevent the union of persons one of whom has been insane or is specially threatened with the disorder. Vain hope. Legislation will not even annul the bond which ties a man or a woman to a partner, perhaps quite young, who is hopelessly insane and will remain so for the space of a long life. We can only trust that by education, by continual ventilation of the subject and exposure of the evils arising from its neglect, public opinion may in process of time be directed towards it, and people will be forced to look upon the act of giving birth to an insane child as a cruel sin. If we examine a family in which insanity exists—where, for instance, one or other of the parents has shown symptoms of mental disorder—we shall probably find that not all the children become insane; indeed, the majority may escape altogether. This may be due partly to a better constitution inherited by some than by others from healthy forefathers, and partly by the environment of some being more conducive to mental health than that of others. But it is impossible to forecast with certainty what will be the fate of this or that child. Some may break down early at puberty or adolescence, while others may show no indication till they attain old age; nay, they may escape altogether, and yet in the next generation the inherited taint may show itself.

For the prevention of insanity we would, if we could, forbid the marrying of unsuitable persons, persons who by reason of inheritance or being themselves neurotic or unhealthy or inebriate are likely to have diseased children. If there is insanity in the family we shall have to consider in how many members and in how many generations it has shown itself. If it has occurred in one of the parents, what was the age of the parent at the time of its appearance? Did it appear when the parent was young, at a time when it must obviously have been inherited, or did it manifest itself later in life with a cause and a history which showed it to have been acquired? What was the age of the parent when the child was born, and was it born before or after the disorder commenced in its parent? If the taint appears to be slight and the individual is strong and healthy and free from all neurotic symptoms, we then have to look at the other side of the union, at the partner that he or she is about to take. If this one's family history is absolutely free from inherited disease and the individual is sound in body, no great opposition can be offered if he or she is willing to undertake the risk, but that there is a risk ought to be clearly explained. On the other hand, if there is a taint of insanity on this side also, if the parties are cousins or either is eccentric, nervous, weak-minded, ultra-religious, or ultra-emotional, the union should be forbidden, not only on account of the offspring, but for the sake of the parties themselves. The effect of the knowledge of this family disorder may have a disastrous influence on their lives and may cause the greatest misinterpretation of actions and trial of tempers. Whatever difficulty we may experience in advising as to the marriage of those in whose families insanity exists, there will be much less when we are consulted about men or women who have already had an attack of this disorder. When the individual is a girl we are at once confronted with the popular and prevalent idea that marriage is a cure and sovereign remedy for such disturbance, and advisers, even medical, say to the parents, "get her married." They think this will cure any remnants of the past attack and be a certain preventive of any in the future. Our advice on the subject is often taken and but rarely followed. The attack will be concealed from the knowledge of the other party, if this is possible, or will be minimised and spoken of as nervous or hysterical, or it will be denied altogether. I hold a strong opinion that people who have been insane ought not to marry at all, that they ought not to inflict on their

partner for life the anxiety and even danger of another attack. No one who has had one attack of insanity can be pronounced free from the risk of another. Insanity is a disease which confers no immunity on its victims like some we have to treat. On the contrary, each attack, if there be more than one, adds to and does not take away the liability to succeeding ones, in this respect following the example of its congeners such as epilepsy or neuralgia. And besides the risk and danger to the partner in the marriage there is the question of offspring. In this there is far greater danger for the woman than the man, for the former has to face the periods of pregnancy, parturition, and it may be lactation, and what numbers do we see who break down after childbirth who had they remained single might have led a happy and a useful life.

Patients and their friends when recovery takes place from an attack of insanity fondly imagine and flatter themselves that they will never have another. They rake up some little circumstance which they think was the cause and argue that it will not occur again; and if they ask us our opinion on the subject it is not easy for a physician to say to one just convalescent and rejoicing in the return of reason and hopeful of the future—it is not easy to say to such a one: "You will surely break down again; you will be as bad as you have been lately, and you should shape your life with this idea ever before you." It would be thought very hard, injudicious, and unkind were we to say this; so we let our patient go and make him or her happy. Nevertheless we ought to advise that no marriage should take place and set before the friends the risks thereof. People with this tainted inheritance do, however, marry without advice, very often in spite of it, and when married they break down, recover perhaps, and break down again. The wife may have puerperal mania at one or more of her confinements, the husband may show symptoms of the disease at an early period. Now, holding the opinion that I do as to the necessity of preventing inherited insanity, I must say that in my judgment people who have had attacks of the disorder ought to have no more children. What can be more lamentable than to see a woman break down in childbed, recover, break down again with the next child, and so on for six, seven, or eight children, the recovery between each being less and less, till she is almost a chronic maniac! I have known this to occur more than once, and doubtless some of you have had a similar experience. For the sake of the mother and the father, to say nothing of the children, there ought to be an end of their begetting when insanity follows the birth. I have a case in my mind where this succession of attacks occurred a number of times—six or seven at least. Both parents—father and mother—died in an asylum. There was insanity in both the father's and mother's family. The children are growing up. The eldest developed dipsomania at an early age. What the others will develop remains to be seen. I do not confine these observations to cases where the mother has become insane after marriage. The same applies to fathers who have had attacks of insanity. There is not, of course, the same personal risk to the father that there is to the mother — the risk of dying in an acute attack of puerperal insanity or of becoming through such an attack permanently insane; but there is the same risk for the children—the same chance of bringing into the world a progeny which shall hand on this heritage of insanity or all the other varieties of neurotic disease.

After hereditary transmission there is probably no cause of insanity which exercises so potent an influence as alcoholic drink. To estimate the extent of this we must go to the reports of the medical superintendents of our pauper asylums, many of whom mention it as bringing a large proportion of patients under their care. The proportion differs much according to the locality and the class of population from which the patients are drawn. As we go from south to north the numbers increase, Cornwall, Devon, and Dorset furnishing the least. These are for the most part agricultural counties, with few large towns. When we examine the reports of asylums in the midst of large manufacturing towns or mining districts the numbers increase, for wages are higher, habitations and life unhealthy, and drunkenness prevalent. And it has been observed that the admissions from this cause are more frequent when trade is good and wages high. When the reverse is the case or when strikes diminish the spending power of the workman the number of the admissions falls. So long as drinking remains as it is it will be impossible, I think, to say that insanity is diminishing, at any rate among the lower classes. The spread of temperance principles, the advance of education, the improved sanitation of dwellings and workshops, and the influence of wholesome recreation for the mind as well as the body will, we must hope, gradually check the drinking that at present prevails; but I must not take up your time by dilating on this subject. That drinking has greatly diminished among the educated classes is beyond a doubt. A certain amount of insanity is produced still by alcohol, together with alcoholic paralysis and dementia, but there is far less among the higher than among the lower classes. The proportion, however, of drinking women is, I fear, greater among the former than among the latter. If we look at the statistics of our public asylums the number of males whose insanity is caused by drink largely predominates, but of the alcoholic cases brought under our notice in private practice a very large proportion are those of ladies. And this will be the case till legislation enacts that such shall be compulsorily detained in inebriate resorts. At present scarcely one will place herself under care and treatment, and the Act is almost a dead letter so far as women are concerned.

From time to time we may have it in our power to give advice concerning the bringing up of threatened children, the children of parents in whose families insanity exists, or who have already themselves shown symptoms of the disease. If the insanity is on the mother's side the child should not be suckled by her, but should have a good wet-nurse. And this for two reasons: the mother's nights should not be disturbed by having to wake and nurse the child; and, secondly, a good wet-nurse is more likely to efficiently nourish it. Nourishment is most essential, and such a child is favourably placed if it is fat, and is badly off if thin. This will depend not only on food, but also on sleep. Of this it cannot have too much. It should be encouraged to sleep as much as possible and at regular times, so that the habit may be engendered and adhered to, and this sleeping—sleeping by day as well as by night—should be kept up for many years, till it is five or six years of age. Children who have plenty of food and sleep are not likely to be troubled by fits or convulsions, but if any should take place they are of grave import, and the cause should be carefully looked for and, if possible, the evil averted. Some nervous children are troubled by nightmare, "night horrors." Judicious care and soothing are needed, judicious treatment by day and the rigid exclusion of all terrifying subjects such as ghost stories, tales of robbers or spectres, threats of bogies or policemen, and the like. Parents are often little aware of what goes on in the nursery behind their backs and what harm their children are deriving from those placed in charge of them. They may be even taught habits of self-abuse by nurses in order to keep them quiet; and their treatment by parents may be equally injudicious if the latter are themselves peculiar and extreme in their views, violent in temper, or capricious. They may spoil them at one time by indulgence in food or drink, they may frighten them at another by intemperate quarrels and noise, or they may dose them with religion till the children loathe it or become the veriest little hypocrites. Dr. Clouston tells us of a little boy aged four "who by dint of constant effort on the part of his mother was so sensitive as to right and wrong that he never ate an apple without first considering the ethics of the question as to whether he should eat it or not; who would suffer acute misery, cry most bitterly, and lose some of his sleep at night if he had shouted too loud at play or taken more than his share of the cake, he having been taught that these things were 'wrong' and 'displeasing to God.' But the usual anæsthesia that follows too keen feeling succeeded the precocious moral intensity in this child, for at ten he was the greatest imp I ever saw, and could not be made to see that smashing his mother's watch, or throwing the cat out of window, or taking what was not his own, were wrong at all."[2] The egoistic nature of those who inherit the insane diathesis I have already mentioned, and this ought to be kept in view in the education of all children born with such a lot. There is much in home life to encourage such egoistic selfishness. It may be an only child or the first child, possibly a delicate child requiring much watching and care. It is easy to foster this selfishness, and much caution should be observed to avoid so doing. The child should have the society of others, should be taught to consider its playmates first and itself last, to share its toys and luxuries, and be good-natured and generous. It should be taught to be considerate towards servants, to be kind and not cruel to dumb animals. Cruelty

[2] Mental Diseases, p. 311.

to the latter is a constant concomitant of weak mind. School, even at an early age, is a benefit to many such children—girls as well as boys. They are taken away from the injudicious spoiling of home, and are compelled to consider their companions and not themselves. They have to obey orders, to observe proper hours, to learn discipline and regularity, all of which may be novelties to them. To many the first going to school is a veritable plunge in a cold bath, but like the latter is highly bracing and wholesome.

There are two sorts of children about whom we may be consulted—the dull and backward and the preternaturally sharp and precocious. The first may not be an idiot or imbecile, but may be backward, slowly developed, and at the age of twelve may approximate in capacity to a child aged seven. Such a one requires special tuition and treatment. It is useless to place him in a form of other boys of the same age and expect him to do the same lessons and compete on the same terms with the others. Still worse is it to punish an unfortunate boy of this class because he does not know his lessons and to set him down as lazy or idle, and cane him because he is dull and accounted as obstinate. Incalculable harm may be done to a boy or girl by mistakes of this kind. The education must be fitted to the capacity, and the tutor must discover whether such a child has a special aptitude for any one branch of knowledge—music, drawing, carpentering, or mechanical engineering. It often happens that there is some latent talent which is well worth cultivating. Then there is the precocious boy—bright, intelligent, quick to learn, the pride of his teachers. If he goes to a private or preparatory school he will be seized upon as one who will win scholarships and bring glory on the school, and he will be crammed for this purpose and will have to contend at the age of twelve or thirteen against a host of other little victims at one of our public schools. I have marvelled at the amount which can be crammed into a boy at this early age. But if a hundred contend for ten scholarships it is obvious that ninety must return empty handed, and these children must at this early age undergo the disappointment of failure. The evils of continual examinations have attracted the attention of many besides the members of our profession. Some six or seven years ago Mr. Auberon Herbert drew up a protest against the system which now prevails, the spirit of place-getting and prize-winning in education, and the dominant position assigned to examinations. It protested against the evils resulting from the intellectual racing of boys and girls against each other, and warned parents that the physical ill-effects were often not disclosed at the moment. It laid special stress on the harrowing and depressing effect which reading with a view to satisfy the examiner's mind necessarily has on the student. It spoke of the hurtful consequences of this, of the temporary strengthening of the rote-faculties to the neglect of the rational faculties, the rapid forgetfulness of knowledge thus acquired, the cultivation of a quick superficiality and power of skimming a subject, the consequent incapacity for undertaking original work, and the desire to appear to know rather than to know. I cannot quote this at length, but it was printed in the *Nineteenth Century* in 1888. Many agreed with it, for it was signed by some hundreds. Amongst them were 377 teachers, including many university tutors, the headmasters of many schools, and no less than 130 ladies who were concerned with the education of girls and cognisant of the evils produced by the sacrifice of education to examination. And besides the teachers it was signed by 62 members of our own profession, including some well-known Fellows of this College. Mr. Herbert has also published not only the names of the signatories, but also between 200 and 300 letters from those who have expressed to him their views on the subject. They bewail the evil, but many do not see clearly what is to be substituted in place of examinations, especially the competitive examinations for Government appointments. The headmaster of Eton says that if the system of competition by examination cannot be altered the conditions of examination can be ameliorated. He speaks of the great increase of the number of boys wearing spectacles, even at Eton. "Many a bright, keen intellect of ten to twelve," he says, "has become dull and blunt and has lost its temper by fifteen or sixteen owing to over-preparation with a view to scholarships." The headmaster of Wellington College is equally severe upon the evils of the competitive system. "It seems to make real education, wholesome development of the natural tastes and faculties, impossible. It kills originality and even intellectual interest. We live in a hurry which allows no knowledge to root itself." And if the evil is great for boys it is ten times greater for girls. Many boys are compelled to go in for examinations, for those "abominations," as one gentleman calls them, the Civil Service and Sandhurst drill. But very few girls are. Few have to earn their livelihood in some walk of life to be gained by competitive examination, and of many of the prizes thus to be gained it may with certainty be said that the game is not worth the candle. We ought not to treat knowledge as a commercial commodity. Nothing nowadays is to be learned unless it will pay, unless it will tell in an examination, and is to be estimated at a pecuniary value. And this is not confined to the middle and upper classes. Says one gentleman: "Every child, the weak or the strong, regular or irregular, who enters an English elementary school is a grant-earning machine. To get the highest grant all must be brought up to the same level in the allotted time. It follows, therefore, that children of naturally slow development must be more or less overtaxed, to the permanent injury of their brain power, and that the bright, intelligent, healthy children have to 'mark time' in their studies while their less gifted fellows are crammed with the necessary amount of knowledge. What are the results? Children are passing out of the State-aided schools of to-day by thousands without having gained a love of learning—in fact, with a positive dislike of acquiring knowledge."

Gentlemen, I have seen—I feel certain that many of you have seen—disastrous effects from pressure of examinations upon boys and girls. They are crammed for examinations; they fail to pass, or fail to gain the prize for which they are competing. The end of all the long and wearisome toil of cramming and grinding is failure. Conceive what this means to the young and developing brain and mind. Many break down in the mere preparation and never get to the examination point. One boy I certified, for it was necessary to send him to an asylum, who had been kept for hours and hours practising the violin. I do not even know that there was any intention of making this boy a professional player, but his father was musical and wished his son to be a proficient. A girl I saw had been practising an equal number of hours daily on the piano to pass some examination or win some prize at the Academy of Music. Not only is there a rage nowadays for competitive examinations, and every school and college and other educational institution must hold out a number of money prizes as baits to catch pupils, but the ordinary pass examinations are divided and subdivided till their number is multiplied indefinitely, and the student has constantly in front of him an examination in some subject or other on which for the time he must concentrate his whole mind, but which is to be completely thrown aside as soon as it is passed, when another has to be taken up in its place. A student's career in our own profession, for example, has not for its aim the acquiring of knowledge, but the passing of examinations. He has no time for the study of disease at the bedside. His knowledge of disease is got out of text-books, or after his examinations are over he must begin by post-graduate courses to learn something about it. Where all this subdivision will lead to at last it is difficult to see. Be it remembered that I commenced by speaking of the education and rearing of the weakly, of those who by reason of a faulty inheritance are likely to succumb to an over-pressure which may not be hurtful to the strong. It is no argument against the evil of such over-pressure to point to the strong, to those who by constitution and favouring circumstances rise without stress or difficulty above their fellows. That there are many such among us we know, and are glad thereof—men who can row in the eight, play football and cricket, and take a first class; but my subject is the prevention of insanity in those predisposed to it, and these are not to be treated like the strong. Unless care is taken the end may be that of a young man who was under me some few years back, who achieved five first classes at Oxford and died from general paralysis at thirty-seven. Weak by constitution, and having an inherited taint, he developed organic brain disease by over-exertion.

In the bringing up of the predisposed several things must have special attention. The first I will mention is the importance of not subjecting such children to narrow and fanatical views of religion. Self, self-introspection, the perpetual consideration of self, are among the characteristics of incipient insanity, and to encourage all this is manifestly the worst thing that can be done. Children suffer terribly in this respect from narrow-minded and bigoted parents who,

convinced that they are right, seek to force upon their offspring their peculiar ideas, and often bring about a hatred of everything religious, if they do no worse. How often has one seen at school that the worst and most vicious young scapegraces were the sons of rigid, uncompromising clergymen. At home such boys are kept so free from vice and in such ignorance of what it means that when turned loose in the freedom of school life they revel in the newfound pleasure and drink deep, regardless of the consequence. Another effect is to make these children dreadful little hypocrites. They have to play a part at home, not daring to divulge their true likes and dislikes, and I have seen long pious letters and pious poems from a girl written to such parents when, as I happened to know, she was as wicked and depraved as any I have met. The next thing to be guarded against is the habit of self-abuse. Children have been taught this by nurses in order to keep them quiet and make them go to sleep. They may also be taught it by other children. I have been told by some women that they have found it out by themselves. I am aware that much nonsense is talked with regard to this habit. Parents who wish to conceal the insanity of their family are ever ready to assign self-abuse as the cause of an attack in one of their children if it can be shown that the patient has ever indulged in this vice, no matter how rarely. Great harm, too, is done by exaggeration of the consequences, as is so frequently seen in the literature disseminated by all the tribe of quacks who prey upon the nervous and frighten them with the hobgoblin of spermatorrhœa and the like. The neurotic, however, are those most likely to suffer from the habit and most prone to indulge in it to excess, and there can be no question that it causes insanity in not a few. Many boys, I feel sure, contract the habit without knowing that any harm can come of it. Ought boys to be warned against it or not? A discussion on this question took place at Bristol last summer, and opinions were given for and against it. My own belief is that boys should be warned, but not girls, who are far less likely to be taught it by others. Since the Bristol meeting my view has been confirmed by the headmaster of one of our chief public schools, who has requested the parents of the boys to take care that their sons are warned against the practice. The habit, if already contracted, should be stoutly resisted, and hard exercise and play, plain living, and the absence of stimulating food and drink should be inculcated with this view.

It would be a good thing if all boys and girls with an hereditary taint were brought up to abstain totally from alcohol. There is always a risk of these neurotic individuals taking to drinking. What is insanity in one generation often appears as inebriety in the next, and they are not likely to give up easily such a habit and craving if once established. Often inebriety is directly inherited. I lately saw a young man aged twenty-four who was emerging from an attack of delirium tremens, one of many he had already had. He began to drink hard at the age of fifteen. His father and mother both drank themselves to death and the son was following their example, and we have at present no law to prevent him. Such young people should be taught to abstain. It will be no hardship if they have never known what wines and spirits are, and they should be made clearly to understand and recognise the reason why such abstinence is enjoined. It is far easier to abstain from childhood than to revert to abstinence in later life.

When boyhood is passed the young man has to choose a profession, and the young woman also, perhaps, has to seek a livelihood in some walk of life. Great are the difficulties which lie in the way of either. The young man is beset almost everywhere by the terrors and evils of competitive examinations. Truly our forefathers were exempt from difficulties which surround us. Appointments could be obtained in the various branches of the Civil Service which offered a steady career pre-eminently fitted for nervous youths, where hours were short, the work light and free from anxiety, and holidays long. Nowadays these posts can only be got by competition. Then there was the army, which was adapted to others. A commission could be bought, and if the lad was not fit for foreign service it could be sold. Now a severe examination has to be passed before Sandhurst can be reached, and many fail and are disappointed after years of cramming. For lads who were not studious and liked an out-door life farming had charms and a livelihood might be earned by the cultivation of the soil; but who at the present time would bring up his son to farm land in this country and climate? Nay, it is difficult to choose a profession for a lad with a nervous inheritance, even if he has plenty of brains and can pass examinations with ease and credit. Take the Civil Service of India, which, I suppose, is the highest prize to be gained by examination. It by no means follows that the lad who is able to gain a high place in this is best fitted to be an Indian civil servant. If he is one of the clever but nervous individuals of whom I have been speaking, he will have to face the dangers of a tropical climate, perhaps in a very unhealthy place. He will have great responsibility at a very early age, for "he may have to administer a district with a population of thousands of human beings. He has to deal with races a large number of whom are highly intellectual, and their management and contentment require not a man of mere ill-digested knowledge, but thought, judgment, self-restraint, and propriety."[3] Many young men whom I have known have succumbed to the climate and the work, and have been obliged to abandon the service. I hold the Indian climate to be extremely dangerous to all who inherit a predisposition to neurotic disease. The same may be said of our army and of those who, successful in examination, pass into the line. Formerly one met men who had passed their lives in the army without ever having been in India. In the days of the East India Company our own regiments did not go there in the numbers they do now, and we kept troops in colonies where now there are none. Now all our soldiers have to spend a considerable time in India or, what is worse, in Burmah, and many come home suffering from brain disorder. My own opinion is that no one who has had an attack of insanity ought to return to India, and I know the authorities are disinclined to allow them, but if they cannot they are practically shelved. The professions imply examinations, hard work, perhaps long waiting and little success. The Church is not suited for a neurotic man. It is an emotional life. He may have difficulties of belief, doubts and scruples of conduct. He will see much sickness and suffering which he is powerless to relieve. It is not difficult to point out the occupations which are unsuited to the neurotic man; it is more difficult to say what is the most suitable. That will be best which entails least worry and responsibility, which does not involve money losses or troubles, or great and sudden disappointments. Moreover, it is very important that every man should have beyond his everyday work some amusement, pursuit, occupation, or hobby—call it what you will—which shall be a relief to him after his daily task, a parergon or by-work, as Plato calls it, which shall be at once a food and a rest to his mind. A man's daily task may be a very monotonous and routine business, which is not enough to occupy a healthy brain; on the other hand, it may be anxious and worrying. In either case it is good for that man to leave his business behind him at his office and devote his energy to something else at home. If we look through the lists of our learned societies—the Antiquaries, the Linnæan, the Entomological, the Geological, nay, even the Royal—how many names do we find of busy men engaged in daily work—city men, solicitors, clergy—who refresh and recreate their minds with these studies and pursuits; and how often do we find a man in business break down, and hear that, apart from his business, he has no thought, no occupation, no amusement. He goes to business early and returns late, and the morning and the evening newspaper are all that he reads from Monday morning to Saturday night. Of the occupation best fitted for women I can say but little, for time forbids. It is easier, I think, to find work for them than for men. But that which so many nowadays wish to take up—namely, nursing—is most unsuitable. Nursing is for the strong, bodily and mentally. It involves great anxiety, great responsibility, and loss of sleep, and therefore is the last calling which the predisposed should follow. When he has chosen or entered on a profession, and very often before he has done either, the young man falls in love and wants to marry. He is not likely to consult our profession as to whether he shall do this, or if he consults us he will not follow our advice unless it should happen to agree with his own wishes. In many cases where the predisposition is strong and the individual manifestly unhealthy and neurotic, we should certainly advise him to abstain, especially if his means are small and pecuniary difficulties are sure to arise if a wife and family have to be kept.

[3] Sir W. Gregory.

These young men generally become engaged first, and then come and consult us as to whether they ought to marry. Were they to ask our advice before they have set their hearts on any particular girl, we should advise them to be sure and select one who was free from all tendency to neurotic disorder and in whose family nothing of the kind has existed. Not an easy thing to discover, I grant, owing to the secrecy with which such a history is concealed; but if a man is prudent and not over-hasty he may learn a good deal of a family before he proposes to contract a marriage with one of its members. And above all, let him avoid a connexion with one of his cousins, for if there is a latent taint it will be intensified by such a union. Marriage for a woman is still more serious than for a man, for she has before her child-bearing with all its dangers. Some women with feeble health and frail physique we should certainly advise never to marry. All who have insanity in their families marry at their peril, and those are the best off who have no children. Such women certainly ought not to marry poor men and have the additional burden of narrow means, the care of a family with but little help, and the ever-present cost of medical attendance and nurses.

Can a man or a woman do anything towards preventing insanity? This is a question sometimes put to us, more frequently, however, with regard to the prevention of a recurrence by those who have suffered from an attack. In many young persons the insanity occurs at so early an age, and is so manifestly due to inherited predisposition, there having been no trouble, sickness, or anything perceptible to cause it, that it is to be feared that no advice that we can give will enable the individual to escape the malady. Nevertheless, the direction to be observed it is not hard to point out. We have seen that in insanity there is an exaggeration of the self or subject consciousness and of the egoistic feeling, which rises to a morbid state when the mind is diseased, but may exist in a less degree in a person who is not insane but is of an insane temperament and predisposed by inherited taint. It is important that such a man or woman should correct as far as in them lies this tendency to egoism and selfishness, should not give themselves up to thinking only of themselves, to brooding over their troubles, paying attention only to their own health, and caring only for their own gratification and pleasures. That this self-consciousness often ends in insanity we know, and from *a priori* reasoning we should expect it so to do. It is clear also that in such a case there is no adjustment of the individual to his surroundings, and this is what constitutes insanity. We see what direction a man ought to take to lead a healthy mental life; that he must not live for himself, but take thought for others, feel sympathy with others, and help and defend others. He must adjust himself to his surroundings, and not strive to adapt the latter to his own whim and wish. All this may be difficult for a man suddenly to do who has never done it hitherto. It is less difficult to train a child in this direction, for it is the direction in which all children should be brought to walk, and more especially those who are predisposed to neurotic disorder. One has seen such at school—eccentric boys who are peculiar in their dress and ways, clever perhaps in some things, but erratic and unsatisfactory. Such boys are rarely gregarious. They do not adjust themselves to their surroundings, but lead for the most part solitary lives, just as the insane do. They amuse themselves alone and nobody knows much about them. It is one of the great advantages of the enforced games at a public school that a check is put thereby on the solitary wanderings of such boys, and for a time, at any rate, they have to congregate with their fellows.

In conclusion, Mr. President and Censors, I beg to thank you, first, for the honour you have done me in appointing me the Lumleian Lecturer for this year, and, secondly, for the patience with which you have listened to my imperfect discourses.

THE Duke of Westminster will introduce a deputation of the Church Society for the Promotion of Kindness to Animals and the Church Sanitary Association to the President of the Local Government Board on Monday, May 27th, asking that in conjunction with the Board of Agriculture a joint departmental inquiry may be instituted by which may be brought about, on the one hand, the betterment of the condition of animals generally, and, on the other, the improved health of the human community as the result of improved conditions of meat supplies.

THROMBOSIS OF THE INTRACRANIAL SINUSES SECONDARY TO SUPPURATIVE DISEASE OF THE MIDDLE EAR.[1]

BY WILLIAM MILLIGAN, M D. ABERD.,

SENIOR ASSISTANT-SURGEON TO THE MANCHESTER INSTITUTION FOR DISEASES OF THE EAR; LECTURER UPON DISEASES OF THE EAR, OWENS COLLEGE; AND ASSISTANT PHYSICIAN TO THE MANCHESTER HOSPITAL FOR DISEASES OF THE THROAT.

ONE of the most important and at the same time most dangerous of intra-cranial complications secondary to suppurative disease of the middle ear is thrombosis of the venous sinuses. Any or all of the sinuses in immediate relation with the temporal bone may become thrombosed as the result of infective middle-ear disease, but the one most frequently found implicated is the sigmoid sinus. The relation of this sinus to the mastoid antrum, mastoid cells, and middle ear will at once offer a ready explanation of this fact. The intervening bony septum between the antrum and the sinus is frequently very thin and perforated at numerous points for the passage of small veins along which infective material is readily transmitted. Septic infection in such cases is preceded by the formation of an extra-dural abscess. In like manner the bony septum intervening between the floor of the middle ear and the jugular bulb is so thin and so riddled with vascular foramina that septic products and pyogenic organisms are readily conveyed to the jugular sinus, with the result that septic thrombosis is readily induced. The petrosal sinuses, both superior and inferior, and the cavernous sinus may likewise become affected, either as the result of direct extension from the middle ear or indirectly from extension of an already existing thrombosis in one of the other intracranial sinuses. Septic thrombosis is as a rule the result of prolonged infective disease of the tympanic mucous membrane and its adnexa, although at times it does occur as a consequence of acute diseases affecting the mouth, pharynx, tonsils, &c., in which rapid extension to the middle ear has taken place along the course of the Eustachian tube. When occurring in the course of chronic suppurative middle ear disease it is usual to find extensive changes in the surrounding bony parietes. This osseous erosion is induced in consequence of the prolonged suppurative disease of the tympanic mucous membrane, which serves the double function of mucous membrane and of periosteum. In rare cases no bone lesion is discoverable, the infective products having been carried directly along the numerous vascular channels existing around the middle ear. Thrombosis of the lateral sinus is most frequently found between the ages of twenty and thirty. It is rare in children and old people. The male sex would appear to be more frequently affected than the female. It is a point worthy of note that in the male thrombosis is most frequently right-sided; in the female, according to Robin, it is most frequent upon the left side. Sinus phlebitis runs a somewhat irregular course. At times death takes place rapidly from exhaustion and collapse; at other times, however, pyæmic metastatic deposits occur in the lungs, liver, kidneys, spleen, joints, &c., and death ensues from gradual loss of strength and marasmus. In other cases, again, a fatal issue may be induced as the direct result of the toxic effect of the pyæmic blood upon the central nervous system or may simply be due to hyperpyrexia. The diagnosis of septic thrombosis is at all times somewhat difficult and frequently is merely a diagnosis of probability. Thrombosis may, however, be fairly assumed to exist if in the course of chronic suppurative middle-ear catarrh there is a sudden cessation of discharge accompanied by persistent pain in and around the ear, a high temperature with marked fluctuations and frequently repeated rigors, vomiting, rapid pulse, and constant headache. Ballance[2] in an able article states that the following group of symptoms occurring together are pathognomonic of the disease: (1) a history of a purulent discharge from the ear for a period of more than one year; (2) sudden onset of the illness with headache, vomiting, rigors, and pains in the affected ear;

[1] A communication made to the Manchester Medical Society on Dec. 5th, 1894.

[2] THE LANCET, May 17th and 24th, 1890.

(3) an oscillating temperature, reaching from 103° to 105° F. and then dropping below 100°; (4) vomiting repeated day by day; (5) a second, third, or more rigors; (6) local œdema and tenderness over the mastoid or in the course of the internal jugular vein; (7) tenderness on deep pressure at the posterior border of the mastoid process and below the external occipital protuberance; (8) stiffness in the muscles of the back or side of the neck; (9) optic neuritis. It must not be forgotten, however, that infective sinus thrombosis may exist along with other intracranial lesions—e.g., abscess or meningitis. Thus we may have cases of thrombosis: (1) with meningitis, (2) with intracranial abscess, or (3) with meningitis and abscess. In such cases the symptoms due to the thrombic process usually, however, gain the ascendency, and may mask other lesions of equally serious import. The difficulties of determining at times which is the predominant intracranial affection are so great that in every case where doubt exists it is advisable to follow a definite course of operative procedure. Such a course has recently been mapped out by Urban Pritchard[3] and consists in: 1. Thoroughly opening the mastoid antrum and exploring the mastoid cells. 2. Failing to find sufficient evidence to account for the whole of the symptoms, the wound in the skull should be enlarged backwards so as to expose the middle and posterior cerebral fossæ above and below the lateral sinus, which should be explored by means of a hypodermic syringe. At the same time extra-dural abscesses may be carefully looked for. 3. If a clot be found in the sinus the internal jugular vein should now be tied, and the sinus opened and cleared of its contents. 4. If there is any suspicion of cerebral or cerebellar abscess exploratory puncture may be made above and below the sinus and the pus if found evacuated. The pathological changes which take place consist of a thickening of the coats of the sinus, desquamation of its endothelial lining, and formation of a thrombus. As the thrombosis is almost invariably infective in origin the clot rapidly undergoes disintegration, and the particles thus formed mix with purulent exudation formed from the inflamed walls of the sinus, with the result that small emboli teeming with micro-organisms are carried away in the blood stream to become impacted in the capillaries of some such distant organs as the lung, liver, or kidney, with the consequent formation of embolic abscesses. Within the skull and around the walls of the sinus plastic exudation occurs. This exudation rapidly disintegrates and forms a purulent layer of varying extent, or, in other words, leads to the formation of an extra-dural abscess. If, on the other hand, the visceral layer of the sinus be the one principally implicated, an acute infective lepto-meningitis rapidly ensues. This may remain as a local inflammatory affection in the neighbourhood of the sinus or may become generalised. The same process may happen in any one of the sinuses already mentioned. Thus, when the internal jugular vein has become thrombosed an abscess may be found in the neck; when the cavernous sinus the abscess may be found in the peri-orbital connective tissue. The bone in the immediate neighbourhood of the affected sinus undergoes certain marked changes. These changes consist in deep pigmentation and erosion of the osseous substance. Pigmentary deposits are also found upon the adjoining surface of the cerebrum in the case of lateral sinus thrombosis, upon the under surface of the temporo-sphenoidal lobe in the case of superior petrosal thrombosis. The systemic pathological lesions will depend upon the duration of the accompanying pyæmic process and upon the particular organ implicated. Thus in the case of the lung an infarction due to pulmonary embolism is produced. This rapidly disintegrates and a pulmonary abscess is thus produced. These abscesses may be multiple and small or may by coalescence occupy a considerable portion of a lobe. In the same way splenic and renal infarcts lead to splenic or renal abscesses with their accompanying symptoms. The differential diagnosis of infective sigmoid sinus thrombosis from such other intracranial complications secondary to purulent middle-ear disease as meningitis and cerebral or cerebellar abscess is as a rule not particularly difficult; but, as has been previously mentioned, thrombosis may, and frequently does, exist in conjunction with one or more of the above-named conditions, so that an accurate estimate of the cases is at times almost impossible, and hence the necessity of operative interference proceeding in definite order. In meningitis, which is usually suppurative in character, the temperature is high, and remains high, the pulse is rapid, of small volume, and frequently irregular. Symptoms due to meningeal irritation are also present—e.g., retraction of the back of the head, strabismus, &c. In abscess the temperature after the first rise falls either to normal or more usually becomes subnormal, the pulse and respirations are slow, and the cerebral faculties are dull and apathetic. In thrombosis, on the other hand, there are frequent and marked irregularities in the temperature chart, accompanied usually by recurring rigors, profuse perspirations, and symptoms of pyæmic involvement. The prognosis in such cases is necessarily very grave, and until within quite recent years the condition was looked upon as practically hopeless. The possibility that the thrombus may become transformed into connective tissue and by blocking the sinus prevent the dissemination of septic products through the system should not be too much relied upon. Most cases which are left to themselves terminate fatally. In 1886 Victor Horsley, in a paper read before the Clinical Society of London, made the very valuable suggestion that the internal jugular vein should be tied so as to prevent the dissemination through the system of the disintegrating and septic clot, qualifying this statement, however, by saying that the operation should be performed only when the first indications of embolism had appeared. More recent investigations have, however, shown that as soon as the diagnosis has been made operation should be undertaken. The earlier the channels along which septic emboli may be conveyed to more distant organs are shut off by ligature from the main blood stream, the better for the patient. Delay at this stage adds greatly to the patient's danger. The duty of the surgeon is clearly to add no element of risk to what may be fairly called a condition of extreme danger. In this country excellent operative work has already been done in this direction by Ballance, Lane, Bennett, Macewen, Parkin, Parker, and many others.

[3] Archives of Otology, vol. xxiii., Nos. 1 and 2.

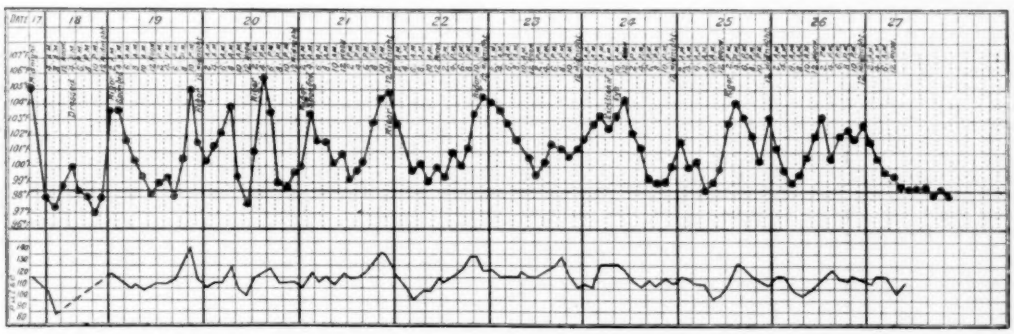
CASE 1. *Uncomplicated sinus thrombosis secondary to old-standing infective middle-ear disease.*—The patient, a young man aged twenty-five years, had suffered from right-sided, suppurative middle-ear disease for many years. Discharge from the ear had been almost continuous, although never very profuse. No pain had been complained of, nor had the patient ever suffered from tinnitus or vertigo. A few days prior to the onset of serious symptoms the patient had contracted a severe chill owing to being exposed on a particularly wet night and to his having been obliged to sit in wet clothes for some hours. This was followed by pain in the ear, radiating over the corresponding temporal region, and by a complete cessation of discharge from the ear. The pain having gradually increased, I was asked by Dr. Brown of Chorlton-road to see the patient along with him upon the evening of Monday, June 18th, 1894. Upon examination the following notes were made. The aspect of the patient was pale and anxious, the skin was clammy, the tongue furred, the bowels constipated, and the urine high coloured. The temperature was 99·4° F., and the pulse 74. Examination of the right ear revealed a very small quantity of fetid discharge within the meatus. After syringing, the membrana tympani was found perforated in its posterior inferior segment. No granulation tissue was seen and no carious area of bone was detectable with the probe. Pressure over the mastoid process produced slight discomfort. The tissues between the angle of the

FIG. 1.

jaw and the mastoid process were puffy, and pressure in this region was accompanied by severe pain. Careful palpation showed that either a chain of enlarged glands existed or that some fulness in the internal jugular vein was present, but which of the two could not be definitely stated. Dr. Brown, upon visiting his patient the same afternoon, had noticed a slight rigor, and this fact, in conjunction with the history and appearances of the ear, made me suggest the advisability of removing the patient to the Manchester Institution for Diseases of the Ear, in order that an operation might be performed the moment an accurate diagnosis could be made. The patient was accordingly removed the same night. The following morning the temperature was 100° and the pulse 86. The condition of the ear was as before. Boracic fomentations were ordered to be applied every half hour, and the ear was kept frequently flushed with a warm solution of bichloride of mercury (1 in 2000). Three grains of calomel were also given. The following day, June 20th, the patient had a well-marked rigor at 11.30 A.M., the temperature reaching 103°. At 5.30 P.M. there was another rigor, the temperature reaching 103·5°; and at 10.15 P.M. the same evening a third rigor took place, the temperature reaching 104°. The pain in the head had by this time greatly increased, and the swelling in the neck had become at least twice the former size and was extremely sensitive to touch. Examination with the ophthalmoscope showed the existence of optic neuritis of the right disc, but no deviation from the normal upon the left side. The pupils were equal and reacted readily to light. As the position of the patient was now becoming critical it was decided that the best course to adopt was to tie the internal jugular vein in the neck, to expose the lateral sinus, open it, and clear out the thrombus which from the previously detailed symptoms was supposed to be present. The patient was accordingly put under an anæsthetic, and an incision was made from a point half an inch behind the attachment of the external ear down over the mastoid process to a point upon a level with the lower border of the thyroid cartilage. Very considerable difficulty was experienced in finding the internal jugular vein owing to the swollen and matted condition of the cervical structures; and as the anæsthetic was being badly borne it was decided to postpone the operation, and to try by freely stimulating the patient to arouse his vitality. Beef-tea, brandy, milk, eggs, and quinine were freely administered. During the two following days the patient had several rigors. He partook freely of nourishment and apparently gained strength. On the 24th he was again put under an anæsthetic and the operation resumed. The incision in the neck was prolonged for another inch and a half, and a careful dissection made until the carotid sheath was reached. This was immediately opened, and two ligatures were placed round the vein at a distance of half an inch from one another. The vein was then divided between the ligatures. Above the upper ligature the vein was felt to be tense as if it contained some firm substance. A three-quarter-inch trephine was now applied immediately over the region of the lateral sinus and a disc of bone removed. The opening thus made was enlarged by means of gouge and bone forceps until one inch of the vertical portion of the sinus was exposed. The sinus felt firm to the touch and no pulsation was visible. A longitudinal slit was now made through the outer wall of the sinus. Very little blood escaped. A small Volkmann's spoon was now introduced through this opening and the thrombus, which was partially adherent to the walls of the sinus, was scraped away. A quantity of pus and purulent débris also escaped. As the clot was removed from the torcular end of the sinus free hæmorrhage took place. This was immediately controlled by packing the open end of the sinus with iodoform gauze and iodoform and boracic acid powders. After as much of the clot had been scraped away as was possible the proximal portion of the sinus and the upper portion of the jugular vein were irrigated with a warm 1 in 2000 bichloride solution until the fluid escaped freely into the neck. The operation was now completed by extending the bone wound forwards until the mastoid antrum was freely exposed. The interior of the antrum, which was filled with granulation tissue and purulent débris, was curetted and a free communication formed with the middle ear. The parts were then carefully dried, dusted with iodoform and boracic acid powders, and dressed in the usual way. The subsequent history of the case was uneventful, the patient making a rapid and good recovery.

CASE 2. *Cavernous sinus thrombosis secondary to acute suppurative middle-ear disease.* — It has been already mentioned that infective thrombosis secondary to middle-ear disease is usually a complication of old-standing trouble and that it usually attacks the sigmoid sinus, but exceptions to this rule are occasionally found. In the following case the thrombosis supervened upon an acute attack of suppurative middle-ear disease, and involved the cavernous sinus, with the formation of an acute pyæmic abscess in the retro-ocular connective tissue. Late upon the evening of Sunday, July 16th, 1893, I was summoned to the country to see a child who was suffering severely from the effects of acute suppuration of the middle ear. The patient, a girl aged nine years, had complained during the preceding fortnight of pain in the right ear, accompanied by a profuse purulent discharge. The ear trouble was considered secondary to an attack of sore-throat, which in turn was suspected by the medical attendant (Dr. Whitaker) to have been of scarlatinal origin, a case of scarlet fever existing in the house at the time. During the day preceding my visit intense pain over the right mastoid process had been complained of. The previous history of the patient had been good, and never at any time had there been evidence of ear trouble. Upon examination the right external meatus was found full of pus. After syringing, a small pulsating perforation was seen in the posterior inferior segment of the membrana tympani. The superior posterior meatal wall close to the attachment of the membrana tympani was found prolapsed. The tissues over the right mastoid process were slightly infiltrated and œdematous. The slightest pressure over the region of the mastoid antrum produced pain, and even gentle percussion made the child shriek. The temperature was 105° F., the pulse 120, the tongue furred, and the surface of the body dry and burning. Great headache was complained of, and the child lay coiled up in bed with her hands tightly clasped over the forehead, which position she said eased the intense suffering. The opinion arrived at was that acute empyema of the mastoid antrum secondary to acute suppurative middle ear disease existed, and an immediate operation was advised. With the assistance of Dr. Whitaker the operation was begun at 1 A.M. on

FIG. 2.



Monday. The mastoid antrum was opened in the usual way, and was found to contain a small quantity of thick creamy pus. The perforation in the membrana tympani was freely enlarged, and a warm 1 in 2000 bichloride solution syringed from the antrum through the middle and external ears. A drainage-tube was now inserted into the antral cavity, the parts dusted with iodoform powder, and the usual dressings applied. At 8 A.M. the same morning the patient's condition was found to be much more satisfactory. The temperature had fallen to 97·4°, and the pulse to 86. The pain had also become much relieved, and the child was able to partake freely of nourishment. During the day, however, the temperature began to rise again, and by 4 P.M., when the wound was dressed, the temperature had reached 100°. The following day, July 19th, the patient had a severe rigor, the temperature reaching 103·5°. Profuse diarrhœa of an extremely offensive character accompanied this rigor. Severe pain over the abdomen was complained of, and copious vomiting followed. A dose of calomel was given and the body was sponged with tepid water, while hot fomentations were applied over the surface of the abdomen. Hot boracic fomentations were also applied to the ear. Free discharge of pus followed. The same evening at 10 P.M. the temperature reached 105°, but no rigor was observed, although the child complained of feeling very cold. A consultation now took place between Dr. Whitaker, Dr. Gillibrand, and myself, and the opinion arrived at was that thrombosis of one or other of the adjoining intracranial sinuses existed, and further operative interference was advised. The idea was to expose the sigmoid sinus, to thrust a hypodermic needle into it, and if found thrombosed to open and clear out the thrombus while at the same time ligaturing the internal jugular vein. The guardians of the child, however, absolutely refused to allow anything further to be done. During the following three days the condition was shortly as follows. On July 20th she had a rigor at 8 A.M. The temperature was 104° and the pulse 114. Cold pack was employed and effervescing antipyrin given internally. She had a rigor again at 4 P.M. The temperature was 105 8° and the pulse 143. Intense pain was complained of in the abdomen, slightly relieved by hot fomentations. The stools were very offensive. On July 21st she had a rigor at 4 A.M. The temperature was 103 6°; during the day she complained of pain referred to the back of the right eyeball. The pupils were equal and reacted to light. There was no optic neuritis. She had another rigor at 10 P.M. The temperature was 104·6° and the pulse 132. On July 22nd her general condition was somewhat better. There were no rigors. The temperature at 4 P.M. was 101° and the pulse 120. She was taking nourishment and stimulants freely. Slight œdema of the right upper eyelid was noticed, and slight blurring of the right optic disc. The ear was discharging freely. There was no special pain about the mastoid region, and no puffiness along the course of the internal jugular vein. On July 23rd the patient had a rigor at 2 A.M. The temperature was 104·4° and the pulse 124. During the day the œdema of the right upper eyelid became more marked. Intense optic neuritis was present, and excruciating pain was complained of behind the right eyeball, which was now protruding from the socket. On July 24th the pain behind the eye was very severe, the right upper eyelid was very œdematous, and there was marked protrusion of the eyeball. The temperature at 6 A.M. was 103° and the pulse 130. At 9 A.M. the right eyeball was excised by Dr. Gillibrand. The orbital cavity was found full of foul-smelling pus. At 12 P.M. upon the same day the temperature was 104·2° and the pulse 126. The stools were dark in colour and offensive. During the rest of the day her condition was much more comfortable. On July 25th the temperature at 8 A.M. was 100·2° and the pulse 102. Boracic fomentations were applied to the eye and ear. Towards evening great pain was complained of in the head and throat. She had a rigor at 6 P.M. The temperature was 104·2°. On July 26th the temperature fluctuated very considerably. Her general condition was better on the whole. She had a slight headache. The stools were still very offensive. On July 27th the temperature had been gradually falling. Her general condition was much better. She slept well and took considerable quantities of nourishment and of stimulants. From this time the patient gradually improved, and in a few weeks' time appeared perfectly well. Nine months afterwards I had an opportunity of again examining the child, when the following note was made: "Her general condition excellent; perforation of right membrana tympani healed; cicatrix hardly visible. Hearing power: right side $\frac{1}{100}$ of the normal. Mastoid wound completely healed, good linear scar." The above case is of peculiar interest as it affords an illustration of thrombosis following an attack of acute suppurative middle-ear disease and also of implication of the cavernous sinus followed by purulent thrombosis of the ophthalmic veins and retro-ocular abscess. Whether the cavernous sinus was implicated as the result of an extension of the thrombic process from the superior petrosal sinus, or whether the sigmoid sinus was the one primarily affected and extension to the cavernous sinus took place secondarily must remain matter for conjecture.

Manchester.

STERILISATION OF MILK.

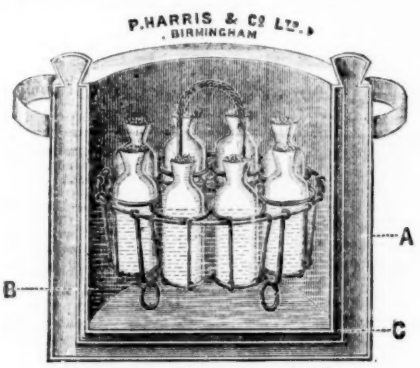
By ALFRED H. CARTER, M.D., F.R.C.P. LOND.,

SENIOR PHYSICIAN, QUEEN'S HOSPITAL; PROFESSOR OF THERAPEUTICS, MASON COLLEGE, BIRMINGHAM.

STERILISATION of milk which is intended for the food of infants or invalids cannot be dismissed as a mere antiseptic fad, for it derives its sanction from no less an authority than nature herself. The milk of all healthy animals is sterile at the time of its secretion and discharge, and under natural conditions it is derived in this state direct from the breast. It does not long remain sterile. From the moment it is exposed to the air it becomes contaminated with various micro-organisms, both fermentative and saprophytic, and occasionally with those of a pathogenic nature. On their introduction into the body they cause little or no inconvenience as a rule, owing to the fact that in the healthy alimentary canal most of them are either destroyed or exposed to conditions unfavourable to their further growth and development; but in unhealthy states it is far otherwise. Fermentative processes are then apt to occur which set up more or less active irritation and inflammation, and in the presence of pathogenic organisms specific disease may follow in susceptible persons. Sterilisation aims at preventing these risks by the destruction of micro-organisms in milk. In other words, the intention is to bring back the milk to the state in which nature originally supplied it. When it is possible to get milk in a perfectly fresh state sterilisation is of course unnecessary, and the same is true for all practical purposes when milk is only kept for a short time under favourable conditions of temperature and cleanliness; but the conditions of milk-supply in large towns, and particularly to the poor in summer time, are such that it is scarcely possible to obtain it free from bacterial contamination of a serious kind without special precautions. It is under circumstances of this kind that the principle of sterilisation may be beneficially applied. By merely bringing milk to the boiling point for a few minutes the majority of micro-organisms may be destroyed; but it requires prolonged exposure to a considerably higher temperature in order to secure complete sterilisation. For practical purposes, however, complete sterilisation is unnecessary. It must be borne in mind that boiled milk undergoes fermentative change almost as quickly as raw milk on free exposure to the air, so that in order to secure the advantages of boiling milk it must either be consumed soon afterwards or subsequent contamination must be prevented. The latter can readily be effected by boiling in bottles (soda-water bottles by preference) the mouths of which are plugged with cotton-wool. The plugs should of course remain *in situ* until the moment that the contents are required for use. This simple method of sterilisation carries with it a very considerable advantage, and if it were uniformly practised in preparing food in hot weather there is no doubt that diarrhœal affections would be far less frequent than they are. A great variety of apparatus has been devised on this principle, but so far as I am aware they offer no decided advantage to the small consumer over ordinary boiling, which can be carried out in every household, however humble.

It would seem *primâ facie* that there was little more to be said on the subject; but it is a matter of general experience that while milk sterilised by boiling is most valuable in the prevention and treatment of gastro-intestinal disorders, not only in infants but in adults, yet as a permanent food it does not fulfil the requirements of perfect nutrition. For a permanent food it is essential that it should possess the element of freshness, or at least contain a due proportion of

some fresh ingredient, in the absence of which scorbutic troubles are apt to arise. Now there are strong reasons for believing that boiling does to a large extent devitalise milk and deprive it of its fresh properties. As to what these properties really are, we have no precise knowledge. That this devitalisation is something more than a mere figure of speech is demonstrated by the fact that perfectly fresh milk has a bactericidal action, like fresh blood, which gradually passes off as the milk loses its freshness. It has been shown that this effect is abruptly destroyed by raising milk to the boiling point. Interesting as this matter is, there is no occasion for my present purpose to dwell upon it further. Again, all the best observers agree in asserting that boiled milk is somewhat less digestible than raw milk, a result which must be attributable to some chemical change or changes induced by boiling. Thus, according to Leeds[1] and Koplik[2] other changes are determined by boiling. It coagulates the lact-albumen; it separates out some of the fat, so that it runs together to form little spots of pure butter; it breaks up the milk-sugar more or less completely; and the casein is coagulated by rennet with greater difficulty. The question then arises as to whether it is possible to destroy the organisms which milk contains without rendering it less digestible. Pasteur has shown that exposure of milk for a short time to a temperature of 131° F. is sufficient to prevent its turning sour, while Koch, Klein, and many others have proved a temperature of 151° to 158° maintained for five minutes is sufficient to destroy all non-sporebearing organisms. Now, so far as can be ascertained, the chemical composition of milk is not seriously disturbed by temperature of this grade, while ordinary fermentative and putrefactive changes are indefinitely postponed or altogether prevented. In order to distinguish this method of treating milk from that by boiling it has been called "pasteurisation." For the purpose of preventing the growth and development of bacterial spores which still retain their vitality it is most desirable that the milk should be quickly cooled as soon as the process of pasteurisation has been completed. Pasteurised milk has been largely used by Freeman, Waldstein, and others in America, who report excellent results. There are some differences in the length of time for which the pasteurising process is continued in the practice of different physicians, varying from twenty minutes to an hour and a half. Dr. Waldstein has invented a most simple and ingenious apparatus for pasteurising milk, which has been submitted to me for trial and an opinion of its merits. I may describe it in his own words:—"I have



A OUTER WATER JACKET
B INNER WATER CHAMBER
C INTERVENING AIR-SPACE

made use of a patented idea of my brother, Dr. M. E. Waldstein, in constructing this apparatus. The principle underlying it is very simple. It turns upon the reduction and equal maintenance of the temperature of the water in an inner compartment, B separated from an outer one, A, in which the water is kept boiling, by an air-space, C, which is larger or smaller according to the difference of temperature which it is desired to obtain. The apparatus is made of tin and is composed of three separate divisions, soldered together in such a manner that it is practically of one piece. Between the inner and outer chamber an air-space of one-sixteenth of an inch is interposed, from which the heated air escapes by holes punched in the top. When it is to be used both compartments are filled with boiling water, the rack containing the bottles is submerged into the inner one up to the milk-line, then covered over with the lid, and allowed to remain upon the stove during an hour and a half. The milk in my apparatus never reaches a higher temperature than 72° C. (160° F.), never one below 70° C. (158° F.); the water around the bottles is soon reduced to and remains at 75° C. (167° F.) or a little over, and the water in the outer compartment is kept boiling during the entire time." It should be pointed out that in order to prevent undue separation of fat, and also with a view of reducing the risk of subsequent bacterial development to a minimum, it is essential that the milk should be quickly cooled at the conclusion of the process. This can readily be done by removing the rack with its bottles from the tin, and plunging it into cold water and keeping it there. I had a good deal of difficulty at first in the breakage of bottles caused by this proceeding; but with a better class of bottles than those supplied with the apparatus these accidents seldom occur. During the last six months the apparatus has been in use at the City Infirmary and the Queen's Hospital, and has given considerable satisfaction. It is easy to use, children and other patients for whom it has been employed like it, and in no single instance has it been found to disagree. It appears to be more readily digested than raw milk, and several instances have come under my notice in which it has agreed when raw milk has disagreed. This may be partly due to the fact that the curd on coagulation is looser and more flaky than is the case with ordinary milk, but it is probably due chiefly to the much less liability to undergo acid fermentation. I have had some few complaints of constipation among young children, but in some of these it was unquestionably due to lime-water which had been added to the milk, and in no case was it troublesome. I have also used it in a case of ulcer of the stomach and in two cases of typhoid fever, and in all three it answered very well. I am wishing to try it in some of those cases in which there is a stubborn idiosyncrasy against milk occurring generally in gouty subjects with a tendency to acid dyspepsia, but as yet I have had no opportunity of doing so. Dr. Waldstein says, however, that in these cases he has never failed with the addition of a teaspoonful of a ½ per cent. solution of hydrochloric acid to each cupful of milk. In further support of what I have said I will turn to a brief series of consecutive cases, kindly reported for me by my colleague, Dr. Short.

CASE 1.—A man aged fifty-six years had chronic gastritis and pain after all food, especially milk. He was ordered pasteurised milk. For the next five days he gradually improved, and there has been no recurrence of the pain.

CASE 2.—An infant aged twenty-one months had otorrhœa, foul stools, and diarrhœa at intervals. Milk and lime-water had been administered without relief. Pasteurised milk was then ordered. In seven days the character of the stools had greatly improved; there were only two daily movements, as against four and five previously. This treatment was continued for a month, and the patient then returned to his ordinary diet. There has been no return of the diarrhœa.

CASE 3.—A man aged twenty-nine years had extensive phthisis. He had vomited every morning for three weeks, in spite of changing his breakfast hour. Pasteurised milk was ordered. For twelve days he did not vomit, and he then returned to his ordinary diet. The patient has not vomited since.

CASE 4.—The patient was a female infant aged nine weeks, a twin child, very small and ill nourished, suffering from diarrhœa and vomiting. She was put on pasteurised milk, with lime-water and cinnamon water. The sickness stopped, but the bowels still remained loose and death ensued a month later.

CASE 5.—A female infant aged one year had diarrhœa and vomiting. For three weeks she had ordinary milk and lime-water without relief. She was then put on pasteurised milk, three parts milk and one part water. She gradually improved and gained a little flesh. The diarrhœa ceased, and vomiting was seldom.

CASE 6.—The patient was a man with gastrectasis following ulceration, with frequent vomiting. In this case the vomiting was not affected by the pasteurised milk unless the stomach was washed out once a week.

[1] American Journal of the Medical Sciences, June, 1891.
[2] Archives of Pediatrics, June, 1891.

In conclusion, I will quote the Sister of one of the children's wards in the City Infirmary, who has used pasteurised milk as a routine food for many of the children under her charge. She says that it has answered better for all-round use than any artificial food she has tried, that it is especially useful in cases of chronic diarrhœa, and that for green offensive stools it seems to be a certain remedy. I venture to submit that with this evidence before us pasteurisation of milk is worthy of our attention, and that Waldstein's apparatus is a cheap, simple, and effective method of carrying it out in practice. The apparatus can be obtained from Messrs. Philip Harris & Co., Limited, Birmingham, at a cost of 12*s.* 6*d.*

Birmingham.

CASE OF MOLLUSCUM FIBROSUM.

By F. K. GREEN, F.R.C.S. ENG.,

SURGEON TO THE BATH ROYAL MINERAL WATER HOSPITAL; ASSISTANT SURGEON TO THE ROYAL UNITED HOSPITAL, BATH.

THE following case of molluscum fibrosum may be considered interesting on account of the large size, peculiar appearance, and situation of one of the mollusc growths.

A man sixty-one years of age was admitted into the Bath Royal United Hospital on Dec. 12th, 1890, under my care, during the absence of my senior, Mr. Fowler. The patient was a man of stunted growth and dull and feeble intellect. He was dark-complexioned and, with the exception of the face, his skin was thickly freckled; in some places the skin was pigmented over an area the size of a sixpenny piece. The most striking feature about him was the peculiar hypertrophy of the skin and subcutaneous tissue of the left side of the face, which caused it to hang in folds, resembling somewhat the face of a bloodhound. These folds of skin hung down two inches below the level of the jaw. They felt quite soft and evidently contained nothing but loose connective tissue and a little fat. The patient said that his mother had

told him that his face had always been more or less in this state, and that when born there was an excrescence the size of a horse bean on that side; also that the deformity had been much more marked, the hanging folds of skin being larger than at present. On the trunk and limbs were innumerable warty growths and subcutaneous tumours, mostly of very small size. The warty growths were both sessile and pedunculated, and most abundant on the trunk, the subcutaneous tumours being almost entirely distributed over the limbs, and of variable size. The largest of these tumours was a sessile one in the episternal notch. It was roughly oval in shape and about an inch and a quarter in length, very soft, and much puckered on the surface. The next in point of size was situated on the scalp in the left parietal region and was of irregular shape. About two inches below the right nipple was a pedunculated tumour as large as a bean; two upon the right buttock had bases larger than a shilling and stood out prominently beneath the skin. They were all soft to the feel. The patient was admitted on account of a large endosteal sarcoma involving the whole of the left forearm, which I amputated soon after admission. The stump healed quickly, but a cough developed, and symptoms of sarcoma of the lung appearing he was transferred to the medical side of the hospital, where in a few weeks he died.

Necropsy.—This revealed extensive sarcoma of the lungs, which under microscopic examination showed large spindle cells. A peculiar feature in this case was the extensive freckling or pigmentation over the body. Curiously enough in looking through an odd volume of the Irish Medical Transactions for the year 1828 I found a similar case recorded by Dr. John Crampton, with an excellent engraving of the patient. The noteworthy features in the case were the large size of the mollusc growths and "large freckles and dark-brown olive spots of various shape and size occupying the cuticle in patches." It would be interesting to know if the coexistence of molluscum fibrosum and pigmentation has been noticed by dermatologists. Perhaps it is only coincidence. Dr. Liveing has pointed out that "it is highly probable that these outgrowths exist in an undeveloped form at the time of birth, though they may be too small to be detected." In the case I have narrated it would certainly appear from the mother's statements that the growth on the face was well developed at birth. The stunted body and feeble intellect of the patient were especially marked, and support the observation of Hebra that molluscum fibrosum occurs very often in people with mind and body imperfectly developed.

Bath.

TWO CASES OF SYPHILIS WITH EARLY NERVOUS MANIFESTATION.

By HENRY LEE, F.R.C.S. ENG.,

CONSULTING SURGEON, ST. GEORGE'S HOSPITAL AND QUEEN CHARLOTTE'S LYING-IN HOSPITAL;

AND

J. A. SHAW-MACKENZIE, M.B. LOND., M.R.C.S. ENG.

As bearing on the late discussion initiated by Mr. Hutchinson at the Royal Medical and Chirurgical Society, Dr. Shaw-Mackenzie has Mr. Henry Lee's kind permission to forward the only two cases he can find of early nervous manifestations, out of 2750 cases of syphilis in some of Mr. Lee's case-books. Whether they are true secondary lesions is apparently uncertain. That they followed primary syphilis within two years is undoubted.

No.	Sex.	Age.	Primary.	Date of secondary nervous affection.	Description of manifestation.
1	F.	14	Sore on labium noticed for two months the size of a shilling piece.	Two months.	Dyspnœa; tracheotomy; convulsive movements of limbs; partial coma for a week; sphincters relaxed; death. Necropsy.—Dura mater adherent, thick and red in patches; brain congested; ventricular walls soft, with fluid effusion; tonsils puckered and purulent; very large quantity of mucus fills larynx and pharynx.
2	M.	32	History of syphilis, vide Mr. Lee's "Lectures on Syphilis"	Eighteen months.	Loss of power right side of body, with difficulty in speech; at 23 months facial paralysis of left side, ptosis of left eyelid, and right arm powerless; death. Necropsy.—Dura mater has partly fibroid, partly caseating, and degenerating tumours, varying in size to a florin piece; similar masses were found in the Sylvian fissures; left optic nerve atrophied from pressure of growths. Microscopic examination by Dr. Whipham showed spindled nuclei in fibrillated network; the softer parts showed degenerated cells and broken-down fibrous tissue. No fibrillation was evident in the earlier growths; the liver substance was studded with transparent nodules of newly formed fibrous tissue.

The following cases of patients presenting themselves with late nervous manifestations are taken from the same source:—

No.	Sex.	Age.	Primary and secondary.	Date of primary nervous affection.	Early treatment.	Late nervous manifestation not secondary to bone lesion.
1	M.	37	Sore papular eruption; ulcerated throat	16 years	Pills, 2-3 years	Loss of smell and taste.
2	M.	—	History of syphilis.	30 years	?	Loss of smell and taste.
3	M.	—	,,	6 years	Pills of red iodide, 6 weeks.	Loss of sexual power; tremors; aphasia; unsteady gait; difficulty in swallowing; death.
4	M.	—	,,	16 years	At Aix twice.	Impotence; advancing melancholia; suicide, though under care of trained male attendant.
5	M.	—	,,	10 years	(?)	Impotence; mental depression.
6	M.	40	,,	16 years	Pills	Patches of numbness in anterior thighs, also in fingers; variable superficial cutting pains; tremors; knee-jerks deficient; mental depression.
7	M.	50	,,	20 years	Mixed	Locomotor ataxy affecting sensory roots.
8	M.	40	,,	5 years	Baths	Vague persistent headache, dimness of sight, reduced sexual power.
9 & 10	M.	—	,,	2-3 years	Baths	Vague headaches and dizziness.
11	M.	60	,,	30 years	(?)	Slight hemiplegia; died a year later of apoplexy.
12	M.	40	Hard sore	18 years	Pills, 2 years	Malnutrition; mental depression; deficient sexual power; neurasthenia.
13	M.	—	History of syphilis	17 years	Baths	Deafness; loss of energy; noises in head.
14	M.	—	,,	3 years	Baths	Ringing in ears.

Mr. Lee's case-books show further cases in the later stages of syphilis of neuralgia of the nerves of the back, sciaticas, debility, rheumatic pains, muscular twitchings, slight losses of muscular power, numbness and deafness, loss of smell, delusions, three to twenty years after primary history, whilst particulars of eleven other cases are found in his lectures on Syphilis. Mr. Lee has met with but comparatively few affections of the nervous system as the result of syphilis, and these he can account for by want of care in the primary stages. He considers it essential in the treatment of early syphilis that exposure to air should be avoided as much as possible, and he cannot remember a single case of gross lesion of the nervous system or internal organs following the careful and detailed primary use of the calomel fumigation bath. In a paper by Dr. Shaw-Mackenzie[1] he stated that many cases of late syphilis which had been treated by mercury internally in the primary stage or irregularly seemed to be intolerant to the further beneficial effects of mercury; also that he had been struck by the few manifestations of syphilis in patients who had been treated from two to thirty years previously for primary syphilis by the calomel bath. He would submit that a method which makes the least demand on a patient's constitution, which does not conduce to digestive troubles and malnutrition, may also, in aiding elimination through the skin, prove truly prophylactic against the later manifestations of syphilis.

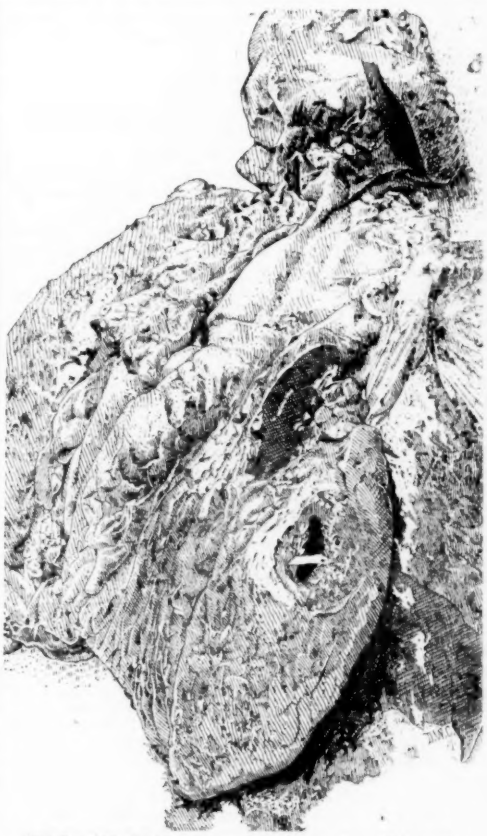
Savile-row, W.

[1] THE LANCET, May 6th, 1893.

A CASE OF IDIOPATHIC RUPTURE OF THE HEART.

BY DUDLEY W. COLLINGS, M.B.,
SENIOR HOUSE SURGEON, TOTTENHAM HOSPITAL.

A MAN, aged fifty-three years, was admitted into Tottenham Hospital on Aug. 7th, 1894, with the following history. He had lived a temperate, sedentary life, being troubled only by dyspepsia and a weak heart. He denied ever having suffered from rheumatism or rheumatic fever. His father died suddenly of heart disease. He had been in his usual state of health and at work up till Aug. 1st, 1894, on which date he felt "out of sorts." On the 2nd he experienced severe pain in the præcordium, and felt too ill to leave



Anterior view of heart and bases of lungs. A small piece of wood is inserted in the rupture. The upper wound, in the left auricle, was made during the necropsy.

his bed. On the 3rd he was worse and sick after food. On the 5th, about midday, his speech became rather thick, but recovered its natural tone later on. At tea-time his mouth was noticed to be drawn to the right side and his left eye was partially closed. The left arm became paralysed, followed by loss of motion in the left leg. On his admission on the 7th he was found to be well nourished, but looked old for his years. He answered questions clearly and explicitly, though with some slight hesitation. The left side of his face (lower part), left arm, and left leg were paralysed. The tongue was deviated to the right on protrusion. The sphincters were unaffected. There was no pain. The heart sounds were faint and there were no added sounds. At about 11 A.M. on Aug. 8th he was moved on to a water-bed, his body and head being kept horizontal, great care being taken to avoid any sudden

movement. At 6 15 P.M. his pelvis was raised to allow of the introduction of a bed-pan and almost instantaneous death ensued. At the post-mortem examination a prolonged and careful search failed to reveal any macroscopic change in the brain, its vessels, or the meninges. On opening the pericardium it was found to be filled with blood clot, and on washing this away a laceration about one and a half inches in length was found in the left lateral wall of the left ventricle. The aperture was closed by recent clot. The cavities of the heart were dilated, the walls thin and in an advanced stage of fatty degeneration. No valvular disease was present. The aorta and its main branches were atheromatous. Both lungs contained calcifying tubercle; the abdomen was loaded with fat; the spleen was soft and friable; the kidneys were engorged, but otherwise healthy. Although the patient's death followed such a slight movement as that of raising his buttocks, and which was apparently "the last straw," he had been able to survive a considerable journey (from Waltham Abbey to Tottenham) in a cab on the previous day. My cordial thanks are due to Dr. Rasch, visiting physician to the hospital, for his permission to publish this interesting case.

TWO CASES OF DIPHTHERIA TREATED BY ANTITOXIN.[1]

BY A. J. RICHARDSON, M.A., M.D. CANTAB.,
ASSISTANT PHYSICIAN TO THE SUSSEX COUNTY HOSPITAL.

CASE 1.—The patient was a girl aged seven years and six months. On Sept. 11th she was said to have had tonsillitis, but to have completely recovered by the 15th. On the evening of Sept. 20th there was copious epistaxis. On the 21st, on the right side of the uvula and anterior pillar of the fauces, there was a shallow, raw-looking ulcer, and the left nostril was filled with a greyish-white membrane down to the orifice. The pulse was 130 and the temperature 101° F. The urine contained over 0·05 per cent. albumen. The patient was given perchloride of mercury and lactic acid (one drachm to the ounce) applied locally. On the 22nd with a nasal speculum a white substance could be seen far back in the right nostril. On the 23rd the temperature reached 102 2°, and the child was distinctly worse. On the 24th the urine contained over 0·03 per cent. albumen. At 7 P.M 0·7 c.c. of Aronson's antitoxin was injected. On the 25th the patient could breathe better through the nose. She was very restless in the afternoon and her temperature rose to 103°. On the 26th the ulcer on the uvula was nearly well. No membrane could be seen in the nose, but the temperature was still keeping over 102° and the albumen had increased to 0·2 per cent.; 1·2 c.c. of antitoxin injected. On the 17th she complained of pain in the legs, and after the most careful examination the knee-jerks could be only doubtfully obtained; anyway, there was very slight reaction. The fauces and nose looked well, but she complained of ear pain. On the 28th pus issued from the right ear. The patient could not hear the ticking of a watch on contact, and the tympanum was perforated. On the 30th the ear was quite free from discharge, and she heard a watch at three inches. The throat and nose looked well, but the temperature reached 103·2°, and the albumen was over 0·1 per cent.; 1·7 c.c. of antitoxin was injected. On Oct. 2nd the temperature was subnormal and the pulse 92. Albumen, 0·01 per cent. On the 3rd the temperature was subnormal, the pulse 104, and there was no albumen. The knee-jerks were very glib. Since then the child has made an uninterrupted recovery.

CASE 2.—The patient was a woman, the mother of the above. On Sept. 23rd a small yellowish patch was seen between the pillars of the left fauces. The temperature was 103° F. Steam and lactic acid were applied locally, and perchloride of mercury given. On the 24th albumen was 0·1 per cent. The yellow patch had grown a little. There was a separate raised white patch between the uvula and the anterior pillar. In the evening a third patch had appeared on the left tonsil. The temperature was 100 2°. 1 c.c. of antitoxin was injected. On the 25th, in the morning, the yellow patch had come round the anterior pillar and spread downwards. The white patch and the third patch remained as on the previous day. In the evening the yellow patch had receded; the edges of the white patch were raised and everted, while the third patch remained as before. On the 26th the yellow patch and the third patch were smaller; the white patch of membrane shed. The temperature was 99·2°. On the 28th the throat was absolutely clear. The temperature was normal and the urine free from albumen. The patient has since progressed without any bad symptoms.

Remarks.—The cases were not in any sense treated with a view of determining the merits of antitoxin; still, the circumstance that both failed in any way to improve until the antitoxin was injected is noteworthy. The mother received her dose on the second day of the disease, and the child much later, so the cases bear out what has been written—that the sooner antitoxin is administered the better is the recovery, and that the later in the disease the larger is the dose required to produce benefit. The estimations of albumen were by Brandenberg's method (checked by Esbach's tubes), but only on particular samples, not on the mixed urine of twenty-four hours. The disease is attributed to an arrangement by which a current of air was allowed to pass through the dustbin into the house.

Hove, Brighton.

[1] Notes on these cases were read at the meeting of the Brighton and Sussex Medico-Chirurgical Society, Oct. 6th, 1894.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF PREGNANCY IN ONE HALF OF A UTERUS SEPTUS BICORNIS.

BY E. G. EMERSON ARNOLD, L.R.C.P.LOND., M.R.C.S.ENG.,
SENIOR OBSTETRIC HOUSE PHYSICIAN TO ST. THOMAS'S HOSPITAL;
AND
W. E. F. TINLEY, M.B., B.S.DURH.,
JUNIOR OBSTETRIC HOUSE PHYSICIAN TO ST. THOMAS'S HOSPITAL.

A WOMAN aged twenty-two years was attended in the Maternity Charity of St. Thomas's Hospital on Feb. 4th, 1895, in her third confinement. On examination the left shoulder was found presenting with the arm prolapsed. The patient had been in labour for upwards of twelve hours, and the os was fully dilated. On passing the hand into the uterus in order to perform version, after the patient had been put under chloroform, there was felt, close against the uterine wall and just above the child's head, which was lying in the left iliac fossa, a thick projecting edge of tissue, the nature of which was not at the time apparent. Delivery was effected by version, the child, a full term male, being stillborn. On examining after delivery it was found that the uterus consisted of two distinct cavities, divided by a septum reaching as far as the position of the internal os, and the fundus presented a median depression separating two divergent cornua. The placenta and membranes were found occupying the right and larger half of the uterus, the left side being empty, but lined by a soft membrane, easily breaking down under the finger. It was now obvious that the projecting edge previously felt had been the lower end of the septum pressed against the left uterine wall. The placenta and membranes were expressed without difficulty, and, some hæmorrhage occurring, a hypodermic injection of ergotinine was administered, after which the uterus contracted well. The patient made satisfactory progress until the tenth day, when a rise of temperature occurred. An intra-uterine douche was given and a large quantity of shreds of decidual tissue evacuated from the left cavity, and these continued to pass for some days afterwards. The temperature gradually fell again to normal, and there were no further untoward symptoms. Abdominal palpation immediately after delivery showed the right half of the uterus to be markedly larger than the left, but a day or two later the left half appeared to be slightly the larger of the two. At the end of a week or ten days both sides felt of equal size. The patient has had two previous pregnancies, the first resulting in the birth of a living child at term, and the second in a miscarriage at the sixth

month. No interference was necessary, and nothing occurred to lead to the diagnosis of the abnormality on either of these occasions. The patient first menstruated at the age of thirteen years, and the catamenia have always been regular and rather profuse. All three pregnancies have been attended throughout by complete amenorrhœa. The pelvis showed no increase in width, such as has been noticed in some cases of double uterus. The promontory of the sacrum was somewhat prominent, and there was some contraction of the conjugate diameter of the brim, without, however, those changes in the external measurements characteristic of the rachitic flattened pelvis. The measurements were: diagonal conjugate, 4¼ inches; distance of iliac crests, 10½ inches; distance of iliac spines, 9¼ inches. Our best thanks are due to Dr. Cullingworth and Dr. Cory for permission to publish this case.

REMARKABLE CASE OF PERFORATION OF EYEBALL.

By H. A. BRYANT, M.R.C.S. ENG. &c.,
RESIDENT MEDICAL OFFICER, COUNTY HOSPITAL, DURHAM.

ON April 3rd a man twenty-one years of age attended the Durham County Hospital with the history that, while walking beside his cart with a friend, he was suddenly struck with something in the right eye, causing him intense pain and loss of sight. On examining him I found a lacerated perforating wound the size of a hemp seed about three-sixteenths of an inch from the outer margin of the cornea, out of which some of the vitreous was escaping. The conjunctiva was congested, there were blood in the lower half of the anterior chamber, but not blocking up the pupil, loss of tension, and sinking in of the iris and lens. Loss of sight both for light and objects was complete. Ophthalmoscopic examination could detect nothing, no reflex being present, and no foreign body could be seen with focal illumination. About four hours after the accident the man was put under chloroform, and I passed a probe into the wound for about an inch in a downward, backward, and inward direction, encountering what seemed to me to be some soft foreign body. As it could not be removed the eyeball was enucleated. On examining the eye afterwards, embedded in the back part of the vitreous a knot of whipcord, evidently from the end of a whip, was found, which must have penetrated the globe and passed through the vitreous. The lens was uninjured. The patient made a good recovery, and left the hospital seven days after the operation. On questioning him he was quite at a loss as to how the accident could have occurred, declaring that his own whip was in the cart, and that no one anywhere near was flicking one about. The case is that of an accident which almost everyone is liable to, and it shows what considerable force there is in a flick of a whip which can penetrate such a tough body as an eyeball.

DISLOCATION OF THE LOWER JAW DURING AN EPILEPTIC FIT.

By CECIL F. BEADLES, M.R.C.S. ENG., L.R.C.P. LOND.,
ASSISTANT MEDICAL OFFICER, LONDON COUNTY ASYLUM, COLNEY HATCH.

A CASE of dislocation of the lower jaw during an epileptic fit is such a rare event that the following is worthy of being recorded. It occurred in a youth aged twenty who had been an inmate of Colney Hatch Asylum about two years and a half. He is the subject of chronic mania, with delusions, is often excited and quarrelsome, and has frequent epileptic fits, occurring more especially during the night, but which interfere but little with his employment on the grounds during the day. He has a somewhat imbecile expression, with a peculiar, hesitating, slow manner of speech; moreover, his lower jaw has the appearance of being rather loosely articulated. Dislocation of the right condyle occurred during the night while the patient was in a severe fit, and its reduction was effected without difficulty when he recovered from it. I have been unable to discover that this rare event has previously happened in this asylum, although some years ago there were two male patients who could put their jaws out and replace them with ease; neither of these was epileptic. Erichsen does not mention epileptic fits as a cause of this variety of dislocation.

A Mirror
OF
HOSPITAL PRACTICE
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ROYAL BERKSHIRE HOSPITAL.

CASE OF DOUBLE BASIC PNEUMONIA ASSOCIATED WITH PREGNANCY, HEART DISEASE, AND BRONCHITIS, AND FOLLOWED BY EMPYEMA; RESECTION OF RIBS; RECOVERY; REMARKS.

(Under the care of Dr. FRANCIS HAWKINS.)

THERE is no doubt that pneumonia is one of the most serious complications of pregnancy, and although several cases are on record where the patient has recovered, its onset is rightly regarded with great anxiety by the physician. Dr. Rendu[1] has in a clinical lecture devoted to this subject entered fully into a consideration of it. That the disease is aggravated by pregnancy is proved by statistics, which show a mortality of 8 to 9 per cent. He further states that the more advanced the pregnancy the graver the pneumonia, the cause of this being partly mechanical, from diminution of hæmatosis; but, in addition, the heart at this period is already fatigued, and the kidneys to a certain extent altered by pregnancy, thus bringing about a serious pathological condition. The frequency of abortion, which aggravates the situation, appears to be due to the fact that the fœtus dies from infection, and the uterus hastens to free itself. Dr. Rendu considers that abortion renders the patient's state more serious, and that dangerous symptoms are apt to develop very rapidly after it. This case, it will be noted, was apparently less fitted than usual to cope with the disease on account of the cardiac affection.

A woman aged thirty-five years was admitted to the Royal Berkshire Hospital on April 5th, 1894, complaining of pain in the left side, cough, and slight expectoration, all of which had commenced suddenly three days before and were not preceded by shivering or vomiting. The thorax, which was well formed, moved but slightly on the left side during inspiration. The physical signs on this side were slight vocal fremitus, absolute dulness over the infra-scapular region, marked dulness over the lower part of the inter-scapular and over the whole of the infra-axillary regions, the breath sounds tubular in character over all the above regions, a small amount of fine crepitation, and a great increase of vocal resonance. On the right side there were no abnormal physical signs. The first cardiac sound was decidedly impure, but there was no absolute murmur. The temperature was 99·6° F. and the pulse 108. The patient was at about the fourth month of pregnancy. On April 7th pain was felt in the right side of the chest, which now moved less freely in respiration, and over the infra-scapular region there was dulness with tubular breathing. The highest temperature (at 3 A.M.) was 102·5°; the pulse was 128. On the 9th the general condition of the patient was very bad, the dyspnœa being very marked and the lower lip cyanosed. The signs of consolidation of both bases were still present. The highest temperature (at 3 P.M.) was 102·6°, the pulse was 132, and the respiration 55. Liquor strychniæ was given every four hours. On the 10th the dyspnœa was less and the lower lip was not cyanosed. The highest temperature (at 11 A.M.) was 100·8° and the lowest was 98·6°. The pulse was 120 and the respiration 50. On the 11th, which was the day of crisis, or ninth day of the disease, the temperature in the forenoon was 98° and the general symptoms were rather less urgent. At 10 P.M., however, there was severe dyspnœa with constant hacking cough, and the pulse rose to 130. Digitalis and ammonia were now administered. (At first the patient was ordered brandy, which she took till the 10th, when port wine was substituted.) On the 15th the patient was not so well and complained of pain in the right posterior axillary line; there

[1] Journal de Médecine et de Chirurgie Pratique, Paris, vol. i., 1893. Sajous' Annual of the Universal Medical Sciences, vol. ii., 1894, H. 13.

was, however, no evidence of pleurisy, nor was the pain relieved by leeches. On the night of the 20th she had a very severe attack of dyspnœa, accompanied by pain all over the chest. Physical examination gave no signs of any morbid condition other than general bronchitis with pneumonia undergoing resolution, and a dilated heart. The digitalis, which had been stopped for a time, was resumed and the patient improved. Subsequent examinations showed only dulness of the right base, with tubular breathing distinct but diminishing. On May 1st the right side of the thorax scarcely moved in respiration, vocal fremitus was absent, and the dulness was increased in area, but the breath sounds were audible; the heart was slightly outside the line of the nipple. An exploratory needle introduced in the right posterior axillary line between the sixth and seventh ribs gave exit to clear fluid; a full-sized trocar was afterwards inserted at the same point, but no fluid came. On the 8th, no further attempt to aspirate having been made, there was no movement of the right side of the thorax during respiration, vocal fremitus was absent, there was dulness posteriorly and laterally, the breath sounds were inaudible, and there was slight ægophony. Over the right infra-clavicular region Skodaic resonance was well marked. The apex beat was approximately one inch and a half outside the left nipple line. Aspiration now yielded more than two pints of clear fluid. On the 15th, six weeks after the commencement of the illness and five weeks after the crisis, there was slight vaginal hæmorrhage without uterine pains. Two days later severe pains were felt in the lower part of the abdomen, and a fœtus between the fourth and fifth months was expelled, together with placenta and membranes. On the 19th there was an attack of urgent dyspnœa, and the physical signs showed an accumulation of pleural fluid, which on exploratory puncture was found to be purulent. A free incision being resolved on, and the patient's condition precluding the use of any general anæsthetic, cocaine was injected at the spot indicated, ice was applied externally, and an opening was made through which a pint and a half of pus escaped. On June 9th, as the purulent discharge from the drainage-tube continued and the lung did not expand much, chloroform was administered and Mr. W. J. Maurice excised portions of the eighth and ninth ribs. A drainage-tube was inserted, and the discharge was considerable until about July 16th. On Aug. 2nd there was some general movement of the right side of the thorax, and the apex beat was inside the left nipple line. A few days later the patient went to the seaside, and on Aug. 24th the tube was discontinued. On Jan. 30th, 1895, the right side of the thorax was found to move fairly well; the percussion note was slightly impaired over the right infra-scapular region, but the breath sounds were distinct. The apex beat was now inside the nipple line, and a well-marked systolic bruit was heard. The operation wound was quite healed. In March the right lung was fully expanded, the difference on auscultation and percussion of the two sides being but small. The cardiac murmur was variable in its distinctness.

Remarks by Dr. HAWKINS.—Pneumonia when associated with pregnancy is by nearly all writers regarded as being extremely dangerous, abortion invariably taking place. I know of but one case other than that now under review where abortion occurred and recovery followed. According to several authorities, including Dr. Wilson Fox, pre-existing heart disease, from which my patient suffered, is another most serious complication of pneumonia, increasing the mortality to 30 and 50 per cent. The present case therefore seems to show that pneumonia, even under the most unfavourable circumstances, if early brought under treatment and managed with strict attention to certain practical details, is a disease which ordinarily tends towards recovery.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.

ANEURYSM OF THE AORTIC ARCH IN A YOUNG WOMAN; NECROPSY; REMARKS.

(Under the care of Dr. A. CHRISTY WILSON.)

THIS case is interesting on account of the unusual conditions alluded to by Mr. Armit in his remarks. Dr. Bristowe[1] writes on this subject: "Aneurysm is a far more common affection in males than in females, mainly on account of their different avocations, and it belongs almost exclusively to adult life. It is a disease, indeed, chiefly of advanced years; still, it not infrequently occurs, both in men and women, between the ages of thirty and forty, and especially in those who have led debauched lives and have suffered from the conditions which produce endoarteritis." Aneurysm of the aorta has, however, been observed at a much earlier age. Dr. Penden[2] showed a girl aged twelve, at the St. Petersburg Medical Society, with the following signs: to the right of the sternum there was a slightly prominent dull area which pulsated; the pulse in both wrists was delayed relatively to the apex beat; a double murmur was heard loudest over this area. There were no symptoms. When six years old she had fallen and struck her right side, and since that time she had had moderate pains in that region. Mr. Edgar Willett[3] brought before the Pathological Society a specimen removed from the body of a girl aged four, showing a sac, the walls of which were thick and well formed, which communicated with the descending portion of the aortic arch. He considered that it might have been produced by the breaking down of an enlarged lymphatic gland, the contents of which had passed into the aorta. The child had died from pericarditis.

A woman aged thirty-three (according to her friends) was found bleeding profusely from the mouth whilst walking in the street, and was taken to the Infirmary at noon on March 23rd, 1895. She was seen to have lost a great quantity of blood before admission, and continued to do so after. The blood was vomited as well as coughed up, and was frothy, arterial and alkaline. The quantity of blood lost was not known, owing to the fact that much had been lost in the streets, and when in the room where she was first brought the patient was extremely restless, throwing herself about, so that only a portion was collected in vessels. When first seen she was extremely pallid, with widely dilated pupils, and the radial pulse was scarcely to be felt at the wrist. She was still spitting and vomiting blood profusely. At Dr. Wilson's request (under whose care the case was admitted) Mr. Armit injected ten minims of ergotin hypodermic solution, but did not succeed in controlling the hæmorrhage to any marked extent. After about fifteen minutes she became less restless and the hæmorrhage diminished and ceased, but the patient was so collapsed that she was unable even to swallow ice or iced water. The voice was markedly changed, being of that peculiar staccato, breathless type so typical in extreme anæmia. There were dyspnœa and bubbling sounds heard by the unaided ear, indicating the presence of a considerable quantity of blood in the air vesicles. In less than three-quarters of an hour another smaller attack of hæmorrhage occurred, but subsided quickly. Mr. Armit gave orders that if she did not have a return of hæmorrhage in a couple of hours she was to be carefully moved on a stretcher into one of the wards. This was done at a little past four. At five o'clock another hæmorrhage, not very profuse this time, set in, and the patient died very soon after. Mr. Armit had thus no opportunity of examining her chest or abdomen during life, and so did not form a definite diagnosis as to the cause of the hæmorrhage. On inquiry he found that she had been ill for about two years, and had suffered chiefly from lung symptoms—i.e., cough, expectoration, dyspnœa, &c., and some laryngeal trouble, indicated by a change in the voice. He could get no definite reliable history as to the patient's previous habits, but was informed that she was not temperate. On Monday, March 25th, Mr. Armit made a post-mortem examination. She was found to be a well-nourished woman with a moderate amount of subcutaneous fat. On opening the chest the left lung seemed to be adherent to the chest wall at the apex, but on minuter examination it was found that there was a large aneurysm springing from the third part of the arch of the aorta on the posterior aspect and concavity, which was inseparable from the lung and could only be detached from the chest wall with great difficulty. It had ruptured into the lung nearly at the extreme apex, which was to some extent consolidated, partly from engorgement and partly from inflammation. The whole aneurysmal pouch was about the size of a cricket-ball, or slightly larger, and had thick walls, especially anteriorly and towards the middle line and below. The interior was very irregular and was covered with deposited clots of varying sizes and shapes. The vessels coming off the arch seemed

[1] Science and Practice of Medicine.

[2] Sajous' Annual of the Universal Medical Sciences, 1891, vol. i., p. 6.

[3] Transactions of the Pathological Society of London, 1892, p. 38.

entirely to have escaped pressure, but the left recurrent laryngeal nerve was found to be tightly stretched and pushed outwards around the aorta. Mr. Armit was much struck with the marked localisation and limitation of the disease to the apex of the left side of the chest. There was no atheroma, calcareous degeneration, or other changes visible in the aorta or other vessels, nor could he find any visceral or other indications of syphilis, gout, or lead poisoning. The spleen, liver, kidneys, adrenals, pancreas, heart, right lung, and bladder appeared to be normal, although very pale. In the pelvis he found a cystic growth, which was adherent to the parietes. This was a medium-sized multilocular cyst of the left ovary, while there was a small cyst in the right ovary. The larynx was not changed. The stomach and intestines contained frothy arterial blood, and were stained, but not ulcerated or otherwise affected.

Remarks by Mr. ARMIT.—It seems to me that an aneurysm of the concavity of the arch of the aorta, situated in the third part, occurring in a young woman who has no other signs of arterial decay, and rupturing high up into the apex of the left lung, is a very rare condition. If she had been examined during life I take it that the altered laryngeal voice (paralysis of the left vocal cord), and perhaps some inequality of the pupils due to the compression of the sympathetic nerve, together with dulness at the left apex, bronchial breathing, a systolic murmur, and perhaps expansile pulsation, would have been the signs that would have led to a correct diagnosis.

Medical Societies.

HARVEIAN SOCIETY OF LONDON.

Clinical Study of some of the more Important Forms of Abscess.

A MEETING of this society was held on April 4th, Mr. D'ARCY POWER, Vice-President, being in the chair.

Mr. HOWARD MARSH read a paper on the Clinical Study of some of the more Important Forms of Abscess. He began by stating his view that when pus was known to be present in a part it should be evacuated without delay, for not only was it an excretion—something which was outside the pale of the economy, and which could serve no useful purpose—but it did mischief in many ways: by producing tension in acute cases, and in chronic cases by burrowing and by leading to the formation of pockets and tortuous passages lined with granulation tissue, which maintained suppuration and which moreover was often tuberculous. Pus also produced erosion of adjacent structures and might make its way into (*a*) the large joints, and (*b*) the large bloodvessels. Mr. Marsh showed nine specimens from the Museum of St. Bartholomew's Hospital illustrating this formidable accident. These included instances in which the three carotids, the thoracic, and the abdominal aorta, the external iliac, and the femoral had been opened by abscesses, and he had known the gluteal and the internal pudic similarly involved. Indeed, there was probably no large artery in the body which had not been opened in this manner. The occurence was very likely to be fatal. Sometimes the abscess concerned was quite small. As to diagnosis, Mr. Marsh remarked that, though fluctuation was usually depended upon as the evidence that matter had formed, it was a symptom that was available in only a minority of cases—namely, in large chronic abscesses. It postulated several conditions which in acute abscesses were often absent—viz, a sufficient quantity of pus to admit of to and fro displacement, a firm background, pliant superjacent soft parts, superficial position, and absence of great tenderness. In numerous instances of acute abscess several of these conditions were absent. The indications then to be depended on were (*a*) elasticity, (*b*) pitting on pressure, (*c*) the tender spot, and (*d*) the soft spot. Attention was then directed to particular abscesses. Acute abscesses of bursæ should be evacuated before the wall burst and pus was widely extravasated; and in glands before the capsule burst and the surrounding connective tissue and skin were involved. A very formidable abscess was that beneath the gluteus maximus, which might follow disease of the lumbar spine, the hip-joint, or the sacro-iliac articulation. The great difficulty was that pus burrowed widely under the muscle and that adequate drainage could not be secured. He had known four such cases to be fatal. Another abscess very likely to produce serious difficulty was the post-mammary. Here wide burrowing occurred and sinuses obstinately refused to heal. He had met with two instances in which the breast had been removed, all other treatment, including free drainage, scraping, and prolonged rest, having failed, after long trial, to secure sound healing. A third variety of abscess referred to was that which follows either tuberculous periostitis of a rib or the periostitis of a rib sometimes met with (as Sir James Paget had described) after typhoid fever. In these cases the abscess is often situated behind the ribs, and can be reached only through an intercostal space. He had lately met with two instances in which a large flattened abscess cavity was found between the costal cartilages and the pleura in the immediate vicinity of the internal mammary artery. In such cases the lining membrane of the abscess must be completely cleared away, drainage provided, and rest and perfect asepsis maintained; otherwise burrowing will continue, and, as he had several times seen, separation of the cartilage from the rib will probably occur. A fourth variety of abscess sometimes lead to a condition the exact explanation of which was apt to escape recognition. When a deposit of tubercle occurred in the deeper strata of the subcutaneous tissue wide undermining of the integument might occur, and one or more sinuses might form which obstinately refuse to heal. A boy was lately in hospital who had two sinuses of long duration in the occipital part of his scalp. The scalp was undermined over an area four inches in diameter. The pus contained tubercle bacilli. The undermined scalp was freely divided, so that the whole cavity was exposed. All the granulation tissue was scraped away and the flaps were readjusted. The parts now healed. Similar examples had been met with in the leg (so that the affection closely simulated necrosis of the tibia), in the forearm, and in other parts. The diagnosis is easily made by finding that the sinuses nowhere pass beyond the subcutaneous tissue (none pass through the deep fascia or traverse the periosteum) and by observing also that wide undermining in a horizontal plane has occurred. The treatment consists of complete exposure of the whole cavity, thorough scraping and careful readjustment, and the use of uniform pressure.

Mr. D'ARCY POWER in commenting upon the paper first expressed the thanks of the Harveian Society to Mr. Marsh for the interesting nature of his communication. He then called attention to the great importance which should be attached by every class of practitioner to a thorough knowledge of suppuration, for in no other case did such apparently trivial conditions lead so frequently to great issues. He asked Mr. Marsh whether he would kindly give the society the benefit of his experience upon the question as to whether absolute rest retarded or prevented the formation of abscesses in diseases of the spine and joints. Mr. Power also asked Mr. Marsh whether he would not lay it down as an axiom that it was advisable to endeavour to obtain union by first intention in every case where such a result seemed possible rather than to drain an abscess as a routine proceeding. Mr. Power also asked what Mr. Marsh recommended should be done in cases where large masses of caseating material lay remote from the joint when the patient otherwise appeared to be cured of the disease from which he had suffered. His own method was to evacuate them completely if he thought that he could obtain primary union, but if this was doubtful he left them alone, as he thought that they were much less likely to do harm if left untouched than if they became septic.

Mr. PEYTON BEALE drew attention to the great value and interest of the specimens which Mr. Howard Marsh had so kindly brought illustrative of the bursting of abscesses into large bloodvessels. He related a case which he had had under his care at the Great Northern Central Hospital about two years ago. The patient was a boy aged fourteen who had a sinus of many months' duration leading down to the back of the femur and opening externally on the lower and outer aspect of the thigh. In operating to remove the necrosed bone which existed both the popliteal artery and vein were so rotten from their proximity to the suppurating sinus that they unfortunately burst during the operation, and about three inches of each had to be at once excised. Collateral circulation had of course been established previously, and the boy made a good recovery.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Adjourned Discussion on the Legal Definition of Sewers and Drains.

A MEETING of this society was held on April 8th, Mr. S. R. LOVETT, President, being in the chair.

After Mr. F. Vacher, M.R.C.P., F.R.C.S. Edin., Medical Officer of Health to the Cheshire County Council, had been unanimously elected President for the ensuing year, the adjourned discussion on Mr. H. C. Jones's paper on the Legal Definition of Sewers and Drains was resumed, Drs. T. O. Dudfield, Kempster, R. Dudfield, Willoughby, and others taking part. The question at issue in the numerous cases constantly coming before the Courts of Summary Jurisdiction, many of which are followed by appeals, was really that of the liability of the local authority or of the owners of the property for the abatement of nuisances arising from, and the proper maintenance and repair of, any given structure or channel, the incidence of the liability depending on the decision of the courts as to whether the structure were a sewer or a drain, and the difficulty presenting itself almost exclusively in the cases of the combined drainage of several houses. The statutory definitions of a drain required its connexion—(1) with one house only or buildings within the same curtilage, and communicating with a cesspit or with a "sewer into which the drainage of two or more buildings or premises occupied by different persons was conveyed;" or (2) "the drainage of any group or block of houses by a combined operation under the order of any vestry or district board," &c. This second definition, though contained in the Metropolitan Local Management Act, 1855, Section 250, and in subsequent Acts, was omitted in the Public Health Act, 1875, which was still in force throughout England and Wales beyond the metropolis, although combined drainage was general enough in provincial towns. This omission was to some extent met by Section 19 of the Public Health (Amendment) Act, 1890, which enabled the local authority to take action on complaints made under Section 41 of the principal Act of Nuisances, arising from such drains and to apportion the cost as private improvement expenses, but this Act was an adoptive one, and even where adopted it introduced a new complication by substituting the words "belonging to different owners" for "occupied by different persons." This section not having been incorporated into the Public Health (London) Act, 1891, the question of ownership or occupation did not arise; but besides the ambiguity attaching to the expression "curtilage," on which judges had differed in the case of block dwellings as to whether the spaces between the blocks could be considered as a *curtilage* or must be deemed a *street*, there was always the difficulty of proving whether the local authority had expressly approved any particular drain connected with several houses *as a combined drain*, or not. It appeared that if the approval were given in general terms, or were inferred from the authority having neglected to express any objection of disapproval, such an arrangement was *de facto* a sewer the repair or alteration of which devolved on the authority itself. Doubtless there would in future be greater caution in giving a general or a tacit sanction to such combined drains, but the *onus probandi*, so difficult in the case of buildings constructed ten, twenty, or thirty years ago, should rest on the person seeking to divest himself of responsibility for a faulty arrangement rather than on the ratepayers collectively, as represented by the local authority. The result of the discussion was a unanimous resolution that, in view of the chaotic state of the present laws on the subject, the London County Council should be urged to avail themselves of the powers inherited by them from the Metropolitan Board of Works to make by-laws on the drainage of houses throughout the metropolis. A petition to Parliament for an amendment of the law was also proposed; but, in consideration of the present state of Parliamentary business, was deferred for future consideration.

MANCHESTER MEDICAL SOCIETY.

Case Illustrating the Difficulty of Diagnosing the Exact Position of a Pulmonary Cavity.—Nephrectomy.—Typhoid Fever.—Renal Surgery.

A MEETING of this society was held on April 3rd, the President, Mr. F. A. SOUTHAM, being in the chair.

Dr. THOMAS HARRIS brought forward a patient who in all probability was suffering from a Pulmonary Cavity, but in whom the physical signs were so slight and indefinite as to render it impossible to diagnose the position of the cavity. The patient was a young woman twenty-one years of age, who had enjoyed good health until fourteen months ago, when she was taken severely ill with symptoms of an acute pneumonia. This illness confined her to bed for six months, and she had never been well since. Even during the first three days of her illness she stated that her expectoration was extremely foul and offensive. It was, however, very small in amount to commence with, but when she had been ill three days it gradually increased in amount, and during the next twelve months she stated she had been bringing up about a pint of foul, fetid matter every twenty-four hours. The patient had been under Dr. Harris's observation for about two months, at the commencement of which period she was bringing up twelve ounces of fetid, purulent expectoration in the twenty-four hours, this quantity being more or less evenly distributed during that period, and, except when she first awoke in the morning, there was no part in the twenty-four hours when she brought up a greater quantity than at any other period. The temperature during the first four weeks during which she had been under observation had been irregular, but had never exceeded 102° F. During the last four weeks the temperature had been practically normal, and the expectoration had diminished to five ounces in the twenty-four hours. The only abnormal physical signs which the patient presented were impaired resonance and weak respiration over the apex of the right lung. When she first was admitted to hospital two months ago an occasional sonorous rhonchus and a few bubbles were audible over the same part, but latterly there have been no adventitious sounds anywhere to be detected. The expectoration had been repeatedly examined for tubercle bacilli with negative results. Guinea-pigs had also been inoculated with the expectoration, but no tuberculosis had developed in them. The case was regarded as probably one of a cavity of a non-tuberculous nature in the apex of the right lung, resulting from an attack of acute pneumonia. An exploring needle had been several times introduced with negative results. The case was interesting as illustrating the difficulty which existed in localising a cavity with sufficient precision to warrant the adoption of surgical interference.

Mr. E. STANMORE BISHOP showed a young woman aged twenty-one years from whom he had removed a Hydronephrotic Kidney, and presented the specimen, consisting of a greatly dilated capsule with almost perfect absorption of all secreting tissue. The ureter in this case had an abnormal origin, springing from the lower extremity of the kidney, so that when the latter rotated forwards and downwards, in which position it was found, the ureter became bent over its lower extremity and thus occluded. During the operation the kidney was incised, allowing the escape of forty-eight ounces of fluid, sp. gr. 1002, which contained albumen and chlorides, with small amounts of blood and pus. No calculus existed. The patient made a rapid convalescence, though a measly rash appeared on the third day on the chest, arms, and legs, disappearing on the sixth day. No other symptoms of measles were present. Five weeks afterwards the patient was in perfect health.

Dr. DRESCHFELD communicated some Notes on Typhoid Fever. After having spoken of the difficulty of distinguishing, especially in the fæces, the typhoid bacillus from the bacterium coli commune, he pointed out that occasionally the sputum and (in some cases of pneumo-typhoid) the urine contained the typhoid bacillus, and these secretions, therefore, should be disinfected. In the fæces the bacillus was rarely formed before the eighth or ninth day of fever, and from observations made by Dr. James Richmond in the Pathological Laboratory of Owens College it appeared that a short time (from six to ten days) after the cessation of the fever the typhoid bacilli were no longer present in the fæces. From this it is evident that the alvine discharges from convalescent patients are no longer a source of further infection. Dr. Dreschfeld gave some instances of infection from the ingestion of oysters, and pointed out that typhoid fever might be communicated by other articles of food; that the typhoid bacilli grow very readily and on most vegetables, and these by being washed or watered with contaminated water may contain the germs of fever; insects also by coming in contact with contaminated sewage or with typhoid dejections may carry the typhoid organism and deposit it on fruit. A certain family predisposition to typhoid fever was then recognised,

and an instance was given of such a group where seven members of one family were affected with typhoid fever within a few weeks. As to the treatment of typhoid fever, statistics showed that though the mortality from typhoid fever had very much decreased in England when considered per population (in 1871 the mortality per 1,000 000 was for England 371, for London 267, for Manchester 450; in 1892 it had fallen for England to 137, for London to 102, and for Manchester to 240), the case death-rate, or the relation of the mortality to the morbidity as shown by the reports of some of the largest fever hospitals such as the Metropolitan Asylums Board, the Monsall Fever Hospital, &c., still shows a mortality of over 17 per cent. This compares unfavourably with the mortality observed in some of the large German and American hospitals where the treatment by the cold bath is carried out systematically. As yet the good effect of the antiseptic treatment which is now largely adopted in England, and which has many advocates, is not apparent from the statistics. At the Monsall Hospital, where this treatment had been tried for some time, the mortality somewhat diminished, but was still over 13 per cent.

Mr. G. A. WRIGHT also made some remarks upon recent cases of Renal Surgery.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Exhibition of Cases and Specimens.—Ectopia Testis.

A MEETING of this society was held on March 28th, the President, Mr. MAKEIG JONES, being in the chair.

Dr. KEELING showed two Dermoid Ovarian Cysts removed a week before from a married woman aged twenty-seven years who had borne two children. One of the cysts was laid open, showing solid fatty contents interspersed with hair. The patient was making a good recovery.

Mr. SNELL introduced cases of Optic Atrophy following Fracture of the Skull, and other patients.

Dr. PORTER showed a well-marked example of Albuminuric Retinitis.

Mr. MAKEIG JONES showed a woman aged forty-six with Double Optic Neuritis who first came under his notice last year with a tumour of the left upper jaw, which rapidly subsided under treatment with biniodide of mercury. She was next seen about three months ago, when she had severe hemicrania on the left side, which soon got well under the old treatment. She came again last week with the pain on the opposite side of the head, and spasm and pain of the right forearm. There was double optic neuritis, worse on the right side, with old anterior synechia of both lenses. Some months after marriage (twenty-four years ago) she had inflammation of both eyes for months. She had had twelve children and three miscarriages. The first children died directly after birth, and some of the children now alive showed well-marked signs of congenital syphilis.

Mr. PYE-SMITH showed a case of Double Excision of the Hip. The patient was a girl aged ten years. She was admitted into the Sheffield Public Hospital in June, 1893, with symptoms of left hip disease. A long splint was applied, but an abscess formed and was opened in January, 1894. Before this the right hip had begun to show signs of disease; an abscess formed, and the joint was excised on May 16th, 1894. It had quite healed by July 1st. A sinus continuing on the left side this hip was also excised on Sept. 7th, 1894. It was quite healed by Sept. 25th. The anterior incision was made in both cases, the carious head and part of the neck only being removed and temporary gauze drainage being used. The patient was walking about the ward before Christmas, but she caught measles and was removed to the Fever Hospital. When now exhibited she could stand and walk with a somewhat waddling gait and could walk well with the aid of two sticks. There was free movement in the hip in all directions. The wounds were sound, and there was no pain.—Mr. Pye-Smith also showed a man on whom he had operated seven and a half years ago for Spasmodic Torticollis by excising part of the spinal accessory nerve. He had been shown in 1888,[1] and he had resumed work and gradually regained more and more the use of his sterno-mastoid and trapezius muscles.

Dr. CLARKE (Chesterfield) read a paper on a somewhat unusual case of Ectopia Testis.

[1] Brit. Med. Jour., 1888, vol. i., p. 272.

Dr. ARTHUR HALL and Dr. ADDISON exhibited and demonstrated numerous Physiological and Anatomical Preparations lately added to the museum of the Medical School.

The President, Mr. Arthur Jackson, Dr. Dyson, Mr. Snell, Mr. Richard Favell, Dr. Sinclair White, Mr. Atkin, Dr. Arthur Hall, Dr. Rhodes, and Dr. Addison took part in the discussions.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

Treatment of Diphtheria by Antitoxin.—Traumatic Stricture of the Urethra.—Tumour in the Region of the Sella Turcica.

A MEETING of this society was held on April 2nd, the Vice-President, Dr. ADOLPH BRONNER, being in the chair.

Dr. HONEYBURNE read notes on two cases of Diphtheria which he had recently Treated with Antitoxin. The first case was a child aged six years, who was seen on Jan. 18th, 1895, suffering from croup. There was no visible membrane; the temperature was 103° F. After the injection of Klein's antitoxin there was a gradual improvement, the membrane being easily coughed up. The second case was a child aged three years with croupy symptoms. The temperature was 101 4°. After the injection of antitoxin marked improvement took place. There was a slight rise in temperature after the injection, followed by a fall to normal. Dr. Honeyburne referred to the importance of making a bacteriological examination in all doubtful cases. After the injection of antitoxin the children were well in two days.—Dr. A. Bronner, Dr. Bell, Dr. Kerr, Dr. Evans, Dr. S. Lodge, Mr. Horrocks, Dr. H. Bronner, and Dr. Goyder spoke on the paper, and Dr. Honeyburne replied.

Mr. HORROCKS described a case of Traumatic Stricture of the Urethra in which he had cut down on and excised the stricture, uniting the divided ends of the urethra with sutures and draining the bladder from the perineum. The wound healed well, and the result was very satisfactory.

Dr. WOOD described a case of Tumour in the Region of the Sella Turcica, which occurred in a man admitted for a fracture of the leg. The symptoms noted were a drooping of the right upper eyelid, dizziness, and mental dulness. The right eye showed corneal opacities and anterior polar cataract, the vision being $\frac{1}{60}$. In addition there were diarrhœa, vomiting, and headache. Later on dysphagia came on, necessitating feeding by means of a tube, followed by left-sided hemiplegia and the formation of a bed-sore on the right buttock. The day before the patient died a discharge of pus came from the nose and mouth. There was no fever. On post-mortem examination there was a tri-lobed enlargement, 1¾ in. by 2¼ in., of the pituitary body, which did not press on the second nerve, but had eaten its way into the nasal cavity. Microscopically the growth was an adenoma of the anterior lobe of the pituitary body.—Dr. A. Bronner, Dr. Kerr, Dr. Goyder, Mr. Horrocks, and Dr. Major discussed the case, and Dr. Wood replied.

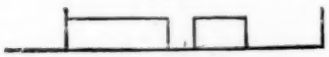
Reviews and Notices of Books.

Clinical Diagrams for Recording Cases of Heart Disease. By GEORGE HERSCHELL, M.D. Lond. London: Baillière, Tindall, and Cox. 1894.

THE graphic method of recording physical signs is of unquestionable value as an adjunct to notetaking. When pursued on a systematic and simple plan it can be made to afford a mass of information which can be appreciated at sight. From time to time various *schemata* have been put forward by clinical observers—as to which we can only say that, as a rule, the simplest are the best. Dr. Herschell in the diagrams he has prepared is evidently of this opinion also. For it will be seen that he gives three chest outlines in order to record respectively in cases of cardiac disease: (*a*) the areas of pain and tenderness; (*b*) the areas of murmurs; and (*c*) the areas of dulness and impulse. By this means he obviates the overcrowding of a single diagram by many signs. The outlines are further marked by vertical lines corresponding to the mid-sternal, parasternal, mammillary, and anterior axillary lines,

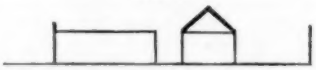
whilst there are introduced two horizontal lines—viz., one at the line of the fourth rib and the other at the lower boundary of the costal arch. We hardly see the necessity of these latter lines, which do not correspond with the ordinary areas of the chest. Each plate contains, further, a series of outlines to represent the sounds of the heart and their rhythm, which are utilised for the graphic representation of alterations in sounds and murmurs on a plan which, in most respects, is tolerably familiar, and was, if we mistake not, first introduced by Professor Gairdner into clinical medicine. The accompanying figures will explain the use to which they are put Fig. 1 is the *schema*

FIG. 1.



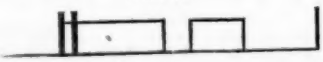
of normal heart sounds, of which four reproductions are given to be used for each of the valvular areas. Fig. 2

FIG. 2.



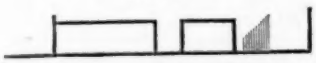
denotes accentuation of the second sound. Fig. 3 indicates

FIG. 3.



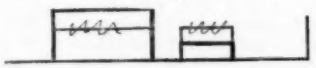
reduplication of the first sound. Fig. 4, a post-diastolic

FIG. 4.



murmur. Fig. 5, increased intensity of first sound and

FIG. 5.



diminished intensity of second sound. Fig. 6, a double

FIG. 6.

murmur accompanying but not replacing the heart sounds. Fig. 7, systolic and presystolic murmurs. Fig. 8, systolic

FIG. 7.

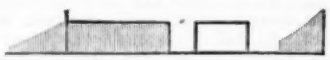


FIG. 8.

murmur followed by a diastolic one prolonged into the period of long silence. We have no doubt that these outlines will be found serviceable, and need only add that they are issued in books containing twenty-five diagrams, with or without directions for their use.

Digestive Proteolysis, being the Cartwright Lectures for 1894. By B. H. CHITTENDEN, Professor of Physiological Chemistry in Yale University, New Haven, Conn., U.S.A. Tuttle, Morehouse, and Taylor. 1895.

THIS book really contains an excellent epitome of the present views held upon the questions concerned in the digestion and utilisation of the proteid food stuffs. It is a reprint of the author's Cartwright Lectures which were delivered in 1894 before the Alumni Association of the College of Physicians and Surgeons of New York. The processes of absorption and the changes which the products of proteolysis undergo in different parts of the body and their probable fate are subjects which are of inestimable importance, and the publication in the present form of the views of so well-known an authority as Professor Chittenden will be welcomed alike by the pathologist and physiologist. In Lecture I. the author deals with the general nature of proteolytic enzymes and of proteids, in which will be found some very interesting observations on the theories of enzymic action, with special reference to catalysis. Just as water serves as a go-between in effecting certain (or is it all?) chemical changes, so with the proteolytic enzymes, pepsin, and trypsin. "They are the go-betweens, making possible the union of the proteids with water by combining with the proteid molecule, and thus paving the way for both hydration and cleavage." Lecture II. discusses proteolysis by pepsin-hydrochloric acid, with a consideration of the general nature of proteoses and peptones; and Lecture III. is devoted to the proteolysis by trypsin and the absorption of the main products of proteolysis. The concluding remarks of the author on the effects of the proteoses and peptones once they have passed outside the limits of the alimentary tract are of particular importance. "It is very evident," he writes, "that beyond this stage these bodies may be passed about from organ to organ and from secretion to secretion, inducing changes here and there in their course, but suffering very little change themselves. The main efforts of the system are directed to the removal of these unwelcome strangers as speedily as possible, for their marked physiological action renders them somewhat dangerous visitors. As normal products of digestive proteolyses they are never found beyond the limits of the gastro-intestinal canal, but undergo retrogression in their passage through the epithelial cells of the intestinal wall, being presumably converted thereby into serum-albumen, which can be directly utilised for the nutrition of the body, a conversion which is plainly dependent upon certain inherent qualities of the living epithelial cells, and is doubtless of the nature of a dehydration." It is superfluous to commend this book, as we are confident that there is not a student of this subject who has no need to be conversant with the views of an authority of the standing of Professor Chittenden.

Archives de Physiologie Normale et Pathologique. Directeurs: MM. CH. BOUCHARD, A. CHAUVEAU, and J. MAREY. Cinquième Série. Tome VI. No. 4. October, 1894. Paris: G. Masson.

THIS, the last, part of the sixth volume of the *Archives de Physiologie* contains, besides some extracts, the following original articles:—1. Researches on Heterogeneous Osseous Graft, by M. A. Mossé. 2. On the Alterations in the Number and Size that occur in Erythrocytes with Varying Altitude, by Dr. A. Mercier, in which it is shown that in accordance with the observations of Viault residence at great altitudes greatly augments the number of the red corpuscles in the blood. 3. Further Researches on Shock, by M. H. Roger. 4. New Measures of the Electrical Conductibility and Physiological Work of the Nerves, by Professor Aug. Charpentier. 5. On the Prolonged Resistance of Highly Vascularised Tissues to Gastric Digestion, by M. Ch. Contrejear. 6. On the Cause of Death after Extirpation of the Supra-renal Capsules, by Nicolas di Dominicis of Naples. 7. On the part played by the Adiabatic Transformation of Gas in the Performances of Registering Apparatus for Compressed Air, and on the Pulsation of the Ventricles, by M. Ch. Contrejear. 8. Physiological Observations on a

Velocipedic Record, by Dr. Philippe Tissié of Bordeaux. The course was a long one, upwards of 350 miles, and was accomplished in twenty-four hours with an injudicious dietary, but without injurious fatigue. 9. Researches on Muscular Respiration, by M. J. Tissot. 10. On the Progressive Changes in the Air occurring during Asphyxia in a Closed Vessel, by M. Laulanié. 11. On the Excitability of Rigid Muscles, by M. J. Tissot. 12 and 13. Contribution to the Study of the Mechanics of Gastric Digestion in the Bird, and on the Innervation of these Parts, by M. Maurice Doyon. 14. On the Action of the Bile and Urine on Thermogenesis, by M.M. A. Charrin and P. Carnot. 15. On the Vaso-dilator Action of Strychnia, by M. C. Delezenne. 16. On the Optometer of Young, by M. Tscherning. 17. On the Saline Digestion of Fibrin, by M. A. Dastre.

A Pharmacopœia, including the Outlines of Materia Medica and Therapeutics, for the Use of Practitioners and Students of Veterinary Medicine. By the late RICHARD V. TUSON. Fifth Edition. Revised and Edited by JAMES BAYNE, F.C.S. London: J. & A. Churchill. 1895.

TWENTY-SIX years have elapsed since the first issue of the late Professor Tuson's little Veterinary Pharmacopœia, and now it has reached a fifth edition. During this somewhat long period the work has been kept up to the times and has served its purpose, as the present edition testifies. Primarily designed for the use of veterinary practitioners and students, it has not deviated from the original arrangement and is a very handy manual of what it professes to be. The veterinary profession is well supplied with works of this class, but Tuson's book is likely to hold its ground so long as it is edited by such a competent and careful authority as his successor at the Royal Veterinary College, Professor Bayne, who appears to have accomplished the task entrusted to him with judgment and skill.

First Aid to the Injured and Management of the Sick: the Bearer's Companion. By Surg.-Capt. E. J. LAWLESS, M.D. Brux. Edinburgh and London: Young J. Pentland. 1894.

SURGEON-CAPTAIN LAWLESS has endeavoured to arrange the subject of first aid instruction to suit the requirements of those attending regimental classes, being of opinion that the "Medical Staff Corps Manual" is scarcely adapted to the more limited needs of a regimental bearer section or of a Volunteer brigade bearer company. The book is divided into two parts, each of which is furnished with an appendix. Part I. deals with First Aid, and is divided into twelve "outline" lessons, which the author hopes will be of use not only to members of volunteer and of civil ambulance classes, but also as a syllabus from which surgeon-instructors and lecturers may elaborate their courses of lectures. Part II. treats of Sick Nursing, Field Hospital Organisation, the Elementary Principles of Health and of Sick Diet, &c. The stretcher exercises, wagon, and handseat drill are taken from the Medical Staff Corps Manual of 1893. In the preface Surgeon-Captain Lawless suggests to the committee of the St. John Ambulance Association that it should introduce a scheme to encourage its certificated pupils to volunteer for Brigade Bearer Company Service. He thinks that there are many men who will not enroll as ordinary volunteers but who would serve as "ambulance soldiers," and that in our county towns the sixty men, with a knowledge of "first aid," could be enrolled to form the brigade bearer companies our Volunteer brigades are so much in need of. We think this an excellent suggestion. The book has been carefully thought out, but it appears to us to contain more information and more technical knowledge than are necessary for the public or for an "ambulance soldier." Like other books of the kind lately published, it errs in that it goes too deeply into many questions which should, in our opinion, be left to the qualified practitioner of medicine. It sets forth in some portions a knowledge which we believe to be dangerous in half-educated hands. The Appendix to Part I. consists of questions and answers. They may serve a useful end, and they certainly suppose a knowledge more suitable to the public than the text of the book would lead us to expect. The chapter on Equipment exhibits some truths which the Volunteer authorities will do well to take to heart. The Appendix to Part II. contains a Bearer's Form of Sick Report for Medical Office and a Table of Poisons. The latter cannot, we take it, be intended for a medical officer, but it certainly is far too deep for a non-professional person. The book will prove a help to the instructors of military ambulance classes; it is illustrated with forty-nine engravings and is sufficiently indexed. The "get-up" of the book is a credit to the firm which issues it.

New Inventions.

AN IMPROVED CLINICAL THERMOMETER.

MR. JAMES J. HICKS of Hatton-garden has forwarded us a specimen of his "Climax" Clinical Thermometer. The principal obstacles to perfection in previous clinical thermometers were the divisions and figures: firstly, because being cut on the surface of the glass they might hold dirt, and possibly convey infection; secondly, because constant wiping was apt to remove the black and make it impossible to read the figures and divisions until they had been recoloured. These two obstacles have been overcome by the "Climax" thermometer. The divisions and figures, instead of being cut on the glass, are placed on a separate transparent scale which is inserted in the body of the thermometer. The readings are therefore clear, distinct, and will never fade, while the risk of conveying infection is minimised, because the surface of the thermometer, being perfectly smooth, can be easily rendered aseptic. At night-time, by holding the thermometer with its back to a candle or other light, the divisions and figures are easily read. The price varies from 60*s.* per dozen to 108*s.* per dozen, according to whether the instrument has a magnifying tube or not, and also whether the bulb is made specially sensitive or otherwise.

AN IMPROVED MULTIPLE LINEAR SCARIFIER.

A, The blades.
B, The arms.
C, The milled heads
D, The handle.

EVERYONE who has used Squire's scarifier must have experienced the difficulties of cleaning the instrument and rendering it aseptic. Messrs. Mayer and Meltzer have overcome these drawbacks, and have made for me an instrument with such improvements as have added greatly to its value. The blades, ten in number, are double-edged and are fastened to the arms of the handle with two bolts, which are held in position and secured by milled heads. The arms are prolonged to a quarter of an inch from the points of the blades and act also as a guard. This instrument can be taken to pieces, cleaned, and put together in a few minutes, and I have used it with most satisfactory results in lupus and rosacea.

G. STOPFORD TAYLOR,
Hon. Physician to the Liverpool Hospital for Cancer and Skin Diseases.

THE LANCET.

LONDON: SATURDAY, APRIL 20, 1895.

IN countries which serve as the breeding ground of cholera—that is to say, in those climates where the disease may be said to be indigenous and where all the natural agencies, conditions, and influences are favourable to its development—it is only to be expected that the agencies outside man should come to be regarded as its sole manufacturers and disseminators. But in order to trace satisfactorily the progress of this and other epidemics disease has to be studied on a small scale where the number of its factors is reduced to a minimum. The history of cholera as a large epidemic has to be deduced from the aggregate of a number of authenticated data about its movement in relation to time and space. The steps of its progress can be more accurately followed in countries where the disease may be regarded as an imported exotic, and by the observers of a local outbreak which possibly forms a very small part of a general epidemic. The number and seeming complexity of the phenomena present during an epidemic are in themselves confusing; it is impossible to ascertain all the conditions and to separate the relevant from the mass of irrelevant facts. That there are some agencies present of which we are still ignorant, in what is called "a cholera year," which are absent in other years, must, we think, be admitted by all who will compare the remarkable statistical differences between them. In India, for example, the figures for 1892 and 1893 serve to mark the marvellous difference between an epidemic and non-epidemic year. But it is at this point that the volume just issued by the Local Government Board, embracing a series of reports and papers on cholera in England in 1893, with an introduction by Dr. THORNE THORNE, the medical officer of the Local Government Board, is so valuable. The reports and papers deal with small and not overwhelming numbers. They take up the history of the disease in this country, trace out its introduction and connexion with importation, its relation to the results of bacteriological researches and local conditions, public water services, and states of public health. They furnish, in short, information which could only be obtained by the combined labours of skilled inquirers.

Dr. BARRY gives a summary account of the disease in England in 1893. There were in all sixty-four localities involved, of which fifteen were metropolitan sanitary districts. The total number of attacks was 237, and of these 135 terminated fatally. In most of the affected localities—that is to say, in forty-two out of the sixty-four—only single cases occurred. The mortality rate of those attacked reached 47 per cent. The first definite case of importation of cholera into England in 1893 was in June, and others followed; but it is worthy of remark that there was no extension of the disease from these cases. It was in August at Great Grimsby that the earliest indications of cholera in England occurred, and at the adjoining district of Cleethorpes, and almost at the same time the disease appeared at Hull. There is no doubt that there was ample opportunity for the introduction of cholera into these Humber port towns in 1892 and subsequently, but the precise time and method of its introduction and the exact date of its earliest manifestations cannot be definitely fixed. Dr. THORNE THORNE is probably quite right in thinking that cholera had made its way into Grimsby and Cleethorpes and acquired a foothold there some time before the fact was recognised. Dr. REECE, in his report on this outbreak, acquits the water service, but attaches importance to the influence of faulty conditions of sewerage and drainage. The probable diffusion of the infection by "trippers"—there were 235,000 excursionists in the six months from May to October booked to Grimsby and Cleethorpes by a line of railway—is described and illustrated in maps showing the topographical distribution of cholera in England during 1893. But one of the most interesting and important points raised in the report is in connexion with the alleged exposure of the oyster beds at Cleethorpes to the effluent from the town sewers, and the suspicion that oysters and other shellfish may have contributed to the diffusion of the disease. About this Dr. THORNE THORNE expresses himself very cautiously and contents himself with remarking that, so long as there is any risk of shellfish being exposed to any such pollution, it is impossible to assert that their use as an article of diet may not be concerned in the production of this class of disease. It is right to add that a correspondent writing to the *Standard* of the 15th inst. states very emphatically that the "set" of the tides at Grimsby and Cleethorpes is such that no taint can possibly be conveyed to the oyster beds from the sewage. Still, the subject is well worth further investigation.

There is one lesson which the medical history of 1893 teaches—viz., that it is impossible to devise any method which shall prove a perfect safeguard against the introduction of cholera into different places, and that it is not so much the introduction of such cases as the local insanitary conditions and surrounding circumstances affording a means for the diffusion and development of the infection that have to be feared. We cannot devise a net for catching disease germs, but we can clear away all muck-heaps in which they can germinate and grow. The fact that there were so many solitary attacks, or attacks limited to two or three cases, is very creditable to our English system of public health administration and to the methods designed and adopted by the Health Department of the Local Government Board.

We must not omit to add that the volume submitted by the medical officer of the Local Government Board is illustrated by a number of maps and plates of a very thorough and exhaustive kind, and affords abundant evidence of the care and ability which have been brought to bear upon the various subjects of which it treats. It must be consulted by all who are interested in the history of cholera in this country in 1893. It contains also a history of the diarrhœal outbreak at Greenwich Hospital and the observations of Dr. KLEIN on the reputed cholera material submitted to him for examination and report.

IN a remarkable passage of his interesting and now famous book, "The Foundations of Belief," Mr. BALFOUR discusses the relative part played by reason and authority in

regulating the opinions and practices of mankind. As many of our readers are no doubt aware, the distinguished writer holds the view that authority is the dominant factor, and that the influence of reason *quâ* reason is comparatively insignificant. "At every moment of our lives," he says, "as individuals, as members of a family, of a party, of a nation, of a Church, of a universal brotherhood, the silent, continuous, unnoticed influence of authority moulds our feelings, our aspirations, and ..... our beliefs. It is from authority that reason itself draws its most important premises. It is in unloosing or directing the forces of authority that its most important conclusions find their proper function. And even in those cases where we may most truly say that our beliefs are the rational product of strictly intellectual processes, we have in all probability only got to trace back the thread of our inferences to its beginnings in order to perceive that it finally loses itself in some general principle which, describe it as we may, is in fact due to no more defensible origin than the influence of authority." In a later passage Mr. BALFOUR affirms that "it is Authority rather than Reason to which, in the main, we owe not religion only, but ethics and politics; that it is Authority which supplies us with essential elements in the premises of science; that it is Authority rather than Reason which lays deep the foundations of social life; that it is Authority rather than Reason which cements its superstructure." With Mr. BALFOUR'S views on ethics, politics, and religion we are not concerned, but we may without presumption inquire how far these somewhat sweeping statements are true of science, and more particularly of our special field—viz., medicine.

That the great majority of mankind take their views on science second-hand—i.e., on authority—is no doubt quite true—is, in fact, almost a truism. We all believe that the earth goes round the sun, but it is only the minority who understand or consciously realise the reasonings by which COPERNICUS upset the Ptolemaic astronomy. Every educated person knows that bodies are attracted towards each other directly in proportion to their mass and inversely as the square of the distance, but comparatively few have followed and deliberately accepted the Newtonian argument. We all know that the blood contains innumerable myriads of tiny corpuscles, but comparatively few have verified the fact by microscopic examination. This is almost self-evident even without the help of Mr. BALFOUR'S stately and sonorous periods. But is it a true inference from these facts that our views on the solar system, or on gravitation, or on the composition of the blood are non-rational or extra-rational? Surely not. We accept a certain view, not in deference to the authority of COPERNICUS or NEWTON, but because we know that the proofs in support of those views are accessible to us if we choose to look into them, and that they are competent to support the conclusions drawn from them. Science knows nothing of authority *quâ* authority. Her most precious maxims are search, inquire, observe, see for yourself, accept nothing without evidence; but science is long and life short, and the bulk of mankind have neither the time nor the capacity to undertake the observations and experiments necessary for the verification of the scientific doctrines which claim attention.

The place of authority in medical science is without doubt a large one. The influence of HIPPOCRATES was immense, widespread, and is by no means even yet exhausted. GALEN ruled the Middle Ages in medicine as truly as AUGUSTINE ruled them in theology. In modern times the Brunonian Theory had an immense vogue quite incommensurate with its merits, and at the present day the Germ Theory insensibly permeates all our views on pathology. There are reasons why the influence of authority is necessarily greater in medicine than in the exact sciences. We cannot bring medical theories to the touchstone of experience and proof as we can bring a fact of astronomy or chemistry. Life is a mystery; disease is an even greater mystery; and it is idle to expect that theories in pathology or therapeutics can be subjected to any offhand or decisive experimental test. The facts are too numerous, too subtle, too closely interlocked to permit of rapid and secure conclusions. Hence the life-long observation and the slowly accumulated experience of a great physician or surgeon possess an intrinsic value, and medical science would be much the poorer if this were not so. But the appeal is always to the fact and not to the dogma, to nature and not to the teacher. In medicine we are ever engaged in a double process—viz., accepting a theory or working hypothesis and subjecting it to constant test and revision. We accept the germ theory on authority, but the practical fruits of asepsis and antisepsis admit of daily experiment and observation. We believe that salicin or nitrite of amyl or strophanthus is a valuable remedy in the first instance on the authority of a distinguished teacher or experimentalist, but ultimately on the results of our own individual experience. Medicine, like other departments of science, does not encourage a blind submission to authority, but rather impels her votaries to the daily accumulation of fresh facts and the daily trial "whether these things be so." A reverent scepticism is the only possible frame of mind for the sincere scientific inquirer. He looks on nature solely with the view of penetrating her secrets, and he accepts every demonstrable fact, no matter how unwelcome or how inconvenient.

It is in the field of therapeutics that the influence of authority is the most potent and perhaps most pernicious. The abuse of blood-letting and mercury are melancholy examples of the evil effects of authority in medicine. We should ever be on our guard against accepting any sweeping dictum unless we can support it by solid evidence. There is no doubt at the present day much routine therapeutics that is simply traditional, and many drugs in the Pharmacopœia are there by "divine right" of custom and authority rather than by personal merit. But at the present day authority is everywhere on the wane, and the tendency is in all cases to refer theories to the test of experience. We should be sorry if the influence of so distinguished a writer as Mr. BALFOUR were thrown entirely into the scale of authority—at least, in the field of science. Science has her adherents, her devotees, her martyrs, but she has no priests. She opens her arcana to all who will patiently look upon them. Patience, humility, and labour are the keys which unlock all her treasuries. The true practitioner of medicine must chiefly "practise"—suffering humanity permits him no choice in the matter—but he will also observe, test, accept,

reject, and press towards the goal of surer knowledge and higher art. He will as little as may be lean on authority, and trust as much as possible to the daily patient investigation of the laws and processes of nature.

WE print to-day the third of Dr. BLANDFORD's Lumleian Lectures on the Diagnosis, Prognosis, and Prophylaxis of Insanity, and we are certain that this, the concluding one, will be found by our readers as lucid, learned, and informatory as its predecessors. The subject-matter of these addresses lends itself agreeably to comment, for it invites debate from all directions. Questions of fact and questions of fancy, the laws of our country and those of WEBER-FECHNER, education with its dilemmas, heredity with its fallacies and its truths, religion, and therapeutics are all involved; and if the politician and humanitarian find serious food for reflection in these problems, no less does the humourist, whether bitter satirist or broad jester, see in them material for the exercise of his wit. Every discussion on insanity must invade the province of the highest physiology, where the outcome of exact knowledge is supplemented or obscured by transcendental speculation, while it must be prepared to deal with points of material detail whose redemption from triviality and even comicality will only be apparent to those who know. It is not our intention to follow Dr. BLANDFORD from point to point in these interesting topics, for the admirable clearness of his lectures makes all exposition unnecessary; but we desire to commend his remarks upon the tyranny of the modern examination system, which were received by the Royal College of Physicians of London with uncompromising approbation, to the close attention of our readers, so suggestive and important do they seem to us.

"I have seen," says Dr. BLANDFORD, "disastrous effects from pressure of examinations upon boys and girls. ..... They fail to pass or they fail to gain the prize for which they are competing. The end of all the long and wearisome toil of cramming and grinding is failure. ..... Many break down in the mere preparation and never get to the examination point. ..... Every school and college and other educational institution must hold out a number of money prizes as baits to catch pupils ..... but the ordinary pass examinations are divided and subdivided till their number is multiplied indefinitely, and the student has constantly in front of him an examination in some subject or other on which for the time he must concentrate his whole mind, but which is to be completely thrown aside as soon as it is passed, when another has to be taken up in its place." These words must not be construed as a sweeping indictment of modern educational methods in general, for it must be remembered that the speaker is only alluding to cases where there exists some predisposition to nervous breakdown. He is not denying that there are very many—an immense majority—of our young people perfectly able to stand the tests which the examination system of to-day lays upon their intelligence, their temper, and their self-restraint. He recognises that for the many who are normal the trials are not necessarily too severe. These need come to no harm, and often thrive mentally and bodily under a discipline to which they are able to properly respond. And it is equally obvious that those who are abnormal—those who are mentally deficient or unstable—will not acquit themselves with satisfaction in higher examinations, and that the attempt to compel them to do so may be fraught with mournful consequences. So far the question is simple enough, as questions always are simple where the extremes are concerned. But when the medical man is called upon to advise in a case where the mental qualities of the student are not displayed to casual view, where the want of ballast or balance is by no means evident, his proper course may be difficult to see. And such cases are not infrequent, and possibly are growing in frequency. For to us Dr. BLANDFORD'S view, that *a priori* reasoning would lead to the supposition that nervous disease is increasing among us as the environment in which we are now living becomes more complex, and thus induces a corresponding complexity of brain centres and functions with more and more instability and liability to disorder and deterioration, seems sadly reasonable. And upon this it follows that there must be with us now a larger class whose possible nervous breakdown is all in the natural order of things, even though there are not enough symptoms present to the eye of the parent to arouse suspicion and perhaps almost nothing subjective or objective from which the medical adviser can predict the impending trouble. How far should his desire to employ proper methods of prophylaxis against a tendency to nervous breakdown lead a medical man to preclude a boy or girl from entering upon a competition, or a series of competitions, while he knows that every lucrative avenue of modern life is barred by examinations?

We do not ask with any idea of attempting to answer—no general answer can be given—but only with the intent to bring before our readers the seriousness of the position in which the medical adviser may find himself, and to urge upon them, in the spirit of Dr. BLANDFORD'S words, not to give way to any parental optimism that the child will grow out of "it," where "it" is a sign of mental insufficiency, but to lean ever to the side of caution, and to recommend in such cases the abatement of examination tests. When such an audience as that before which Dr. BLANDFORD was speaking receives with applause words of warning against the possible evils of educational pressure, the existence of such evils must be held proven. It becomes, therefore, the duty of every practitioner to whom the welfare of a child is confided to deal boldly with the point. The question of money, of a career, possibly of a brilliant future for the child, will be very clear to every parent, so that the advice to withdraw a boy or girl from competitions, success in which should enable him or her at an early age to achieve independence, will not be received gratefully by any parent unless it can be enforced by accurate demonstration of the good sense of the recommendations. And in many cases it is impossible to demonstrate to the layman the slender signs and unsubstantial symptoms upon which the advice has been based. Nevertheless, it is the practitioner's duty where he has a child to deal with who exhibits in character or mannerism any evidence of nervous instability to insist that to force such a child upon a course of examinations is to court for him or her a terrible fate.

Annotations.

"Ne quid nimis."

THE RESEARCH SCHOLARSHIPS OF THE GROCERS' COMPANY.

IT will be probably well known to such of our readers as it most urgently concerns that applications for appointment to these scholarships must be made during the month of April in each year, so that this seems to us a fitting time to briefly announce the conditions under which they are granted. The scholarships have been designed as stipends for those engaged in research into the etiology and possible preventive treatment of important diseases. Candidates, who must be British subjects and at their first candidature under the age of thirty-five, must apply for appointment to the Clerk of the Company, Grocers' Hall, E.C., during the month of April, and such application must be accompanied by an exact statement of the nature of the proposed research and unexceptionable testimonials as to the candidate's ability to conduct the same. The Court of the Company reserve to themselves all discretion as to the appointments, taking every pains to estimate the relative importance of the subjects of research brought under their notice, and in particular the relative probability that the research would result in the desired increase of knowledge. In appointments to scholarships preference within certain limits will be given to gentlemen already holding scholarships who desire to continue their work, this preference being dependent, of course, upon the advances made in the research. All researches are to be conducted under conditions of time and place satisfactory to the Court, so that reasonable facilities may be given to the Court for observing their progress. In bringing these facts before our readers we are only echoing, we are certain, their thoughts when we compliment the great City Company on its enlightened benevolence.

QUASI-MEDICAL IMPOSTORS AND THE PRESS.

EVERY charlatan must congratulate himself that his commerce in the fears and the credulity of mankind is so lightly regarded by public opinion. It matters not that his medicaments may be as old or older than his generation, and may have done service in medical practice to the limited extent of their powers before his very being was thought of. It is of no moment that his diagnoses, like his knowledge and like the testimonies of his grateful "patients," are of the most imaginative character. If he will profess enough and loudly enough, truth apart, he may long remain the adored of numerous dupes. If he should err—and in this respect he is most human—he has ample dexterity in handling excuses. The Press overflows with his self-laudation and with the gibes which, emboldened by his own great ignorance and that of a simple multitude who worship him, he casts at the honest labour of scientific medicine. It must ever appear to instructed persons a marvellous thing that men of this type should thrive as long as they do by the practice of such open and unabashed imposture. Yet, after all, the success of their speculations is not unaccountable. In order to explain it we have to make due allowance for the action of shrewd and unscrupulous business capacity upon the minds of simple and unsuspecting people, many of whom are still to be found everywhere. We must remember, too, that the principle of *caveat emptor* continues to rule the affairs of daily life. This explains the complaisance with which many tales of diseases treated by the magic of some quack mixture, showing in every line the evidences of fabrication, are published at length in the daily press. How far this principle may be allowed to carry us is a question as yet unfortunately not settled by any legislative order. When, however, we find that journals of repute and authority are capable of lending their space without comment to the base purposes of a nostrum-seller, we cannot but feel that an offence has been committed against many readers who are accustomed to trust them as competent sources of information. It is clearly undesirable that medical practitioners, even if blessed with that leisure which they lack, should engage in barren argument with irresponsible persons who admit not even the premisses of scientific teaching. It is their still higher privilege to show, by the skill and care of their methods, as well as by the firm and judicious exercise of that authority which must go with their knowledge, what can and also what cannot be accomplished by the art which they practise. In so doing we consider that they are justified in expecting to receive the frank support of all sections of the Press without the addition of insinuations published by mercenary wonder-workers.

THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

WE announced last week the appointment of Dr. G. Seaton Buchanan as a medical inspector of the Local Government Board. Quite apart from his relationship to Sir George Buchanan, late medical officer to the Board, his claims to consideration were very high. His medical career has throughout been a very distinguished one; he is a Doctor of State Medicine in the University of London, and he has for several years devoted himself to the practical study of the infectious fevers and of the work of a medical officer of health. He is certain to maintain the traditions which marked his father's successful official career. But we regret to say that the vacancy, which was created somewhat suddenly and unexpectedly by the resignation of Dr. Hubert Airy, was due to increasing ill-health on Dr. Airy's part. Dr. Airy has done work in relation to epidemiology and to the etiology of disease of which any worker may feel satisfied; and if he has of late years undertaken duties which, though not of less importance, have brought him less than formerly under public notice, it has been due to slow but increasing failure of health. In his retirement he will carry with him the kindest recollections and sympathy of all his colleagues; and many others who will recall him will have in recollection a cultured and refined personality which always secured for him the friendship and esteem of all who were capable of appreciating his high qualities. We can only wish for him all the enjoyment which may be possible, in view of the circumstances with which his retirement from public office is associated.

THE IDENTIFICATION OF BLOODSTAINS.

THE third volume of Medico-Legal Studies,[1] compiled and recently published by the Editor of the *Medico-Legal Journal*, New York, contains an interesting epitome of the present position of our knowledge bearing upon the identification of bloodstains. In regard to chemical tests—the guaiacum test and the production of crystals by the addition of common salt and glacial acetic acid (Teichmann's crystals)—it is stated that these several tests, while reliable in determining whether the matter examined contains blood or not, are of no value and throw no light whatever upon the question as to whether it was the blood of man or of animals that was examined. The application of the exceedingly delicate instrument, Sorby's spectroscopic eye-piece, is next described, and it is said that by its means the late Dr. Richardson of Philadelphia was able to detect the 3000th part of a grain of blood on an axe-handle supposed to have been used in a case of murder. The succeeding section, on the value of the microscope in the differentiation of the blood of man and of domestic animals, contains a really valuable collection of material which

[1] Medico-Legal Studies, vol. iii., by Clark Bell, of the New York Bar and Editor of the Medico-Legal Journal, 57, Broadway, New York. 1895.

every medico-legal practitioner would do well to have by him. The illustrations are not a matter for congratulation, but the tables of the micrometric dimensions of the blood corpuscles of mammals are useful. On the whole, the conclusion—which is founded upon the evidence of well-known toxicologists like Professor Theodore Wormley, Professor Reese, who edited the American edition of Taylor's "Medical Jurisprudence," Dr. Richardson of Atlantic City, Dr. Stevenson of Guy's Hospital, and others—appears to be that with a skilled and careful microscopist and a good instrument of high powers it will generally be possible to distinguish a human bloodstain from that of any of the lower animals with the possible exception of the guinea-pig and opossum. This subject is, however, one upon which it is well known that there exists a diversity of opinion amongst the leading authorities.

SWALLOWED HALFPENNIES.

A DEATH is reported from Chorley of a young woman who eight years ago swallowed a halfpenny, but had suffered no inconvenience from it. Death was caused, according to the paper, by sudden sickness and the consequent rupture of a bloodvessel. She vomited a green corroded halfpenny. *A propos* of this case a corroded and attenuated halfpenny has been shown us with the following authentic history. A boy three years old on Nov. 12th, 1874, swallowed a bronze halfpenny. Consultations were held, but the coin neither passed nor could be reached. Occasionally he had difficulties of swallowing, which he had to overcome by stretching his neck to one side and changing his position, but otherwise he had no pain or inconvenience. At an early stage of the case he used to bring up a little stained mucus. On Sept. 21st, 1888, the halfpenny was brought up unexpectedly and without effort or vomiting, the boy having swallowed it just thirteen years and ten months previously. He has since been entirely free from symptoms. The halfpenny was very thin and light and gave the impression that it might have been gradually dissolved had it not been so happily got rid of. Its weight was 57 grains, that of a new bronze halfpenny being 86 grains.

THE DEATH AT ROCHFORD WORKHOUSE.

AN inquest was held at Rochford Workhouse on Wednesday, April 3rd, when certain facts were elicited that seem to us to call for more publicity among medical men than they have yet received. Charles Phillips, a pauper inmate, died on the previous Saturday after removal from the padded cell attached to the institution. Dr. L. L. James, the medical officer of the workhouse, stated that the death occurred from erysipelas, the result of injury and shock. Evidence went to show that Phillips was not of sound mind. He was not in the slightest degree violent, but simply old, feeble, and childish, and as he was seen to fall down twice against his bed, once striking his head against the locker, it is not suggested that the injuries were other than self-inflicted accidents. But the immediate cause of the shock which contributed to the sad end was made the subject of dispute at the inquest, under circumstances which did not display the guardians of the parish in an attitude of particular wisdom. The patient had been removed to the padded cell upon instructions received by the master of the workhouse and unknown to the medical officer. The cell was a cold, indiarubber-lined chamber, badly ventilated, and therefore most unfit for the reception of an aged, enfeebled, bruised man, and the evidence of the medical officer went to show that the removal of Phillips to it on two extremely cold nights contributed to his death. The jury concurred in the medical officer's view, returning the following verdict: "The deceased died from erysipelas resulting from injury to the eyes, which was purely accidental, and also caused by being removed from the warm infirmary to the cold padded room," and adding to it a rider to the effect that in their opinion the guardians should have consulted the medical officer before putting deceased into the padded room. The rider is one that we entirely approve of. Padded rooms are useful in a course of treatment in certain cases, and their employment, like all other details of medical treatment, should be strictly under the physician's jurisdiction. They are designed to assist the patient by preventing him from injuring himself, and it is an absolute abuse of their purpose to transform them into convenient places for the irresponsible stowing away of the sick. The insufficiency of the nursing staff of the institution was also revealed at the inquest, as the evidence went to show that three old feeble paupers, "one of whom had to be accommodated with a chair," had been told off to take care of others so sick and helpless as to require constant attention.

"MIND THE WHIP."

THE resident medical officer of the County Hospital at Durham sends us a note, which we publish in another column, on a sad accident which has happened before and will happen again—whose infrequency, indeed, strikes us as almost remarkable. The patient while walking beside a cart with a friend suddenly felt that he had been struck in the eye, intense pain and total blindness being the result. A foreign body in the interior of the globe having been diagnosed the eyeball was removed, and a knot of whip-cord discovered embedded in it. This is an accident against which it would seem impossible to guard, and many of us must shudder to think that it has been no fault of our own or of our cabman that it has not happened to ourselves. In particular is it an accident likely to happen to the rider in hansoms, for he cannot see the movements of the driver, which certainly conduce not infrequently to the smart flicking of the fare over the face through the open window. From the expected blow, even though the period of possible expectation be of the briefest, the interior of the orbit is generally safe, for the first wincing movement is to close the lids. But the rider in hansoms gets no warning at all. When we attempt in our mind to estimate the number of people carried in hansoms during, say, a year, and, drawing upon personal experience, credit a large proportion of them with an unexpected stripe from the whip across the face, we wonder that more eyes are not sacrificed to the unskilful or careless brandishing of the hansom cabman's whiplash.

THE EXAMINATION OF SCHOOL CHILDREN'S THROATS.

THE prevention of the spread of infectious disease through the agency of schools is certainly one of the most difficult duties which devolve upon the medical officer of health. On the one hand, he is prompted to school closure or the exclusion from school of children from infected localities or houses; and on the other he is anxious as far as possible not to interfere unduly with the educational work of the institution and the prospect of the Government grant. In many instances it is obviously no easy matter to determine which course to pursue. In this connexion we note that Mr. Wellington Lake, the medical officer of health of the Guildford and Woking rural districts, has recently made a practice of examining the throats of children on the reassembling of the schools in his district, and it must certainly be said—as, indeed, we have frequently pointed out—that there is much in favour of this course. Mr. Lake uses for his purpose nickel-plated tongue depressors, several clean

towels, and a laryngeal mirror; and after the inspection of each child's throat the tongue depressor is carefully cleansed in a basin of hot water, the contents of which are frequently changed. This cleansing of the spatula is a very important point, and too much care cannot be exercised. Boiling water would theoretically be the safest course, but there are certainly practical difficulties in the way of using it—such, for instance, of maintaining the water at boiling point and cooling the spatula after immersion. Probably Mr. Lake's method carefully carried out is all that is necessary, though perhaps the immersion of the spatula in a disinfectant solution and then in the hot water would be a course better calculated to disarm theoretical criticisms which have to our knowledge been made. Mr. Lake's plan is to exclude from school every child presenting the least signs of a *sore-throat*, and he has succeeded in keeping most of such cases from school until the throat has become normal. In cases of enlarged tonsils or elongated uvula he advises removal. Mr. Lake reports that since he has adopted the measures above referred to he has noticed a remarkable diminution of diphtheria in those districts where the disease formerly persisted, and that the occasion for school closure does not seem to arise either from diphtheria or scarlet fever, as in addition to the above measures he exercises a rigid control over infected houses and their inmates. Mr. Lake points out that to some extent his practice plays havoc with the school attendance as it necessitates excluding all cases of sore-throat, however trivial. He thinks, however, that the Education Acts should be adapted to the times, and that children excluded by the medical officers of health should, for statistical purposes, be regarded as having continued their attendance.

THE ORAL INSTRUCTION OF THE DEAF.

A MEETING composed of medical men and others interested in the education of the deaf and dumb was held on the 5th inst. at 26, Golden-square, for the purpose of hearing a lecture from Mr. S. Schöntheil, for many years head master of the Jews' Deaf and Dumb Home, on the most modern and scientific method of training the deaf and dumb, so as to enable them to use articulate speech and to give them a full command of language. The lecturer opened the proceedings by introducing several of his pupils and testing the results of their training by exercises in pronunciation, lip-reading, dictation, recitation, reading, and answering miscellaneous questions. Through this searching ordeal the pupils passed very successfully. Most people are aware of the enormous difficulty entailed in teaching the deaf to speak; where a child is stone-deaf the obstacles are greatly enhanced and the intonation is apt to be specially faulty. In this respect Mr. Schöntheil's pupils acquitted themselves with marked success. The lecturer explained that in the case of several the instruction imparted to them had first of all proceeded on a faulty basis, and that in consequence they had been compelled to unlearn much that they had first learnt. Nevertheless, steady progress had been since achieved, and the results were considered very promising by the experts present. Mr. Schöntheil then expounded in his paper the aim of the oral method to restore the deaf to the society from which his defect tends to cut him off and laid special stress on the endeavour which he considered ought to be made to avoid distortions of the face and raucous sounds. After giving examples of the lines of thought by which the instruction of the deaf was to be conveyed, he concluded with pointing out the strong necessity for having properly trained teachers of the deaf and for devoting special and individual attention and kindness to each pupil. Mr. Charles E. D. Black formerly secretary to the Royal Commission on the Deaf, testified to the high opinion formed by the Commissioners of the results of Mr. Schöntheil's teaching, and added that he had no doubt that with the more favourable conditions under which, as he understood, Mr. Schöntheil was now working, the results which would be attained would be even more successful than heretofore.

THE ROYAL COMMISSION ON TUBERCULOSIS.

IT will be remembered that this Commission was appointed in July, 1890, with the following reference: "To inquire and report what is the effect, if any, of food derived from tuberculous animals on human health, and, if prejudicial, what are the circumstances and conditions with regard to the tuberculosis in the animal which produce that effect upon man." This reference resulted from the desire of the Government to obtain an authoritative scientific opinion on the public health aspect of the question before it could deal with the numerous complaints made by meat and milk traders of the great diversity of practice in dealing with this class of food that exists in different places. The Commission of 1890 met under the chairmanship of Lord Basing, the other members being Professor Brown, Sir George Buchanan, Dr. Payne, and Professor Burdon Sanderson. On Lord Basing's death in October of last year the experimental inquiries of the Commission were not completed, and the Commission was reorganised with Sir George Buchanan as chairman. We understand that this Commission has now agreed upon its report, which will be presented to Parliament in the course of next week.

THE CLINICAL RESEARCH ASSOCIATION.

WE have received the small handbook of the Clinical Research Association, Limited, in which are carefully and clearly set forth the aims of the association and its methods of work. As there seems to be some little misunderstanding as to the objects and position of this association the appearance of this little work is well-timed, and we cannot but think that many of those who take the trouble to study its pages will come to the conclusion that it will be advisable for them to join the association. The Clinical Research Association has for its object the provision of a clinical laboratory equal to, or better than, many of those connected with the various schools of medicine and hospitals; which laboratory shall be open for the carrying on of the work required by those engaged in general practice who, with the best will in the world, have neither time nor opportunity to make those irregular or tedious observations which are often required to complete a diagnosis. Such a laboratory has often been suggested, but the difficulty of carrying on, side by side, original investigation for the sake, merely, of what is to be found out and the same investigation in return for a definite fee has always cropped up. We are glad to see, however, that the association has taken the bull by the horns, and has laid down the proposition that in pathology and clinical research the labourer is worthy of his hire just as much as when the same labourer is feeling a pulse and writing a prescription. The work of the association is not done for old pupils, for old teachers, or for personal friends, and, therefore, a fee is expected for each investigation as surely as one is expected for a consultation. The association undertakes to examine sputum for tubercle bacilli and for other micro-organisms, for lung tissue, &c. The examination of urine, blood, pus, vomit, and fæces is undertaken; tumours and diseased tissues are investigated, and specimens taken from the throats of diphtheria patients are examined and analyses of drinking water and poisons are made. Although the fees for these examinations appear to be somewhat low we suppose that the association can afford to send good reports in consequence of the number of specimens that they have to examine. In

fact, it is acknowledged that a large proportion of the examinations which are undertaken could not possibly be reliable at the price charged unless the association received a large measure of support from the profession, so that a number of examinations of the same character may proceed side by side. The association already numbers over 850 members, and over 2300 specimens have been examined and reported upon during the past six months. This is an exceedingly good record, and the association, if it continues to be as well managed as it apparently is at present, should ultimately be very successful indeed. Through its agency the best opinions are placed at the disposal of every member of the association, and the gain to diagnostic accuracy arising from such work must be enormous. We wish the association the success it deserves.

THE REAPPOINTMENT OF MEDICAL OFFICERS OF HEALTH.

WE have called attention in our columns from time to time to the insecurity of these appointments, and for the benefit of the community it would be well if the Local Government Board would formulate some regulations which would prevent the annual reappointment of such officers. To subject the medical officer of a district council to annual re-election is an anomaly which ought not to exist and practically is an incentive to avoid doing anything which might offend some of its members. Last week Mr. Hannah, the medical officer of health for Abram, a colliery district in Lancashire, retained his appointment by the casting vote of the chairman only. He has held the appointment for nineteen years and discharged the duties conscientiously and with great ability; no fault could be found with him in this respect. He has, moreover, been subject to annual re-election. This time the new district council advertised the appointment, and an opponent was brought in the field—with the result that the casting vote of the chairman was required for Mr. Hannah to retain the appointment held so long by him. Why should the health officers (medical officer and sanitary inspector) be the only officers subject to such a rule? Why not the clerk and surveyor also? Even the board itself is not subject to an annual re-election. Medical officers of health should now bestir themselves in regard to the tenure of their appointments.

ON CATCHING COLD.

MARK TWAIN once wrote a paper pointing out the appalling danger of going to bed as exemplified in bills of mortality. For one person who died out of his bed several hundreds succumbed in bed, and now we have Mr. Ashby-Sterry drawing attention to the same thing. Hitherto he has hymned in graceful verse pantalettes, frills, and the tempestuous petticoat, and now, *quantum mutatus ab illo Hectore*, he lauds the pyjama. In a recent number of the *Graphic* he says:—

"I have a theory that most people catch cold at night after they are in bed, and it is to this fact I attribute a great deal of the violent colds, the bronchial catarrhs, and influenza which have recently been so prevalent. The temperature goes down suddenly in the night, and people catch cold when they are asleep without knowing it. This evil is to be counteracted, not by piling on a lot of heavy blankets, but by wearing thick, close-fitting garments of a pyjama-like nature and warm socks on the feet. If this system were adopted I am quite certain that it would be found beneficial."

There is common sense in this. People unquestionably may catch cold in bed, especially if they are at all restless and so kick the bedclothes off. In that event, if only clad in a thin cotton nightshirt, they are sure to catch cold, whereas if clad in pyjamas, not necessarily thick but made of some woollen material, the chance of a chill is much lessened. Our ancestors, even as late as the eighteenth century, went to bed, as Malory centuries earlier phrased it, "as naked as a needil"; but only the hardiest of them survived. We, however, are cast in more tender moulds, and require protection by night as well as day. The feminine portion of the community will, we fear, not adopt Mr. Ashby-Sterry's suggestion, for though, as an eminent authoress once remarked, "a woman looks so down-trodden in her nightdress," still that vesture offers opportunities for ornament which pyjamas, at best unlovely garments, never do. Perhaps the Rational Dress Society may take the matter up, and Mr. Henry Holiday might turn his attention to devising a really artistic as well as hygienic night-gear.

THE AGE-CONSTITUTION AND THE DEATH-RATE.

THE closer dependence of the death-rate on the age-constitution than on the sanitary condition of a community, rendering it absolutely necessary to reduce the former to a common standard before any conclusions can be drawn as regards the public health, is well known to statists, but little understood by the general public or their local representation. A striking illustration is given by Mr. May, medical officer of health for Aston Manor, in his report for last year. The age-constitution of the population as given at the last two censuses was:

	Under 5 years.	5—10	10—15	15—25	25—35	35—45	45—55	Over 55
1881	157	131	110	191	156	113	74	68
1891	127	123	119	204	162	113	68	74

This enormous reduction in the child population and relative increase of ages between fifteen and thirty-five, those of lower mortality, is wholly due to a continuous decline in the birth-rate during the last fifteen years, which has shown itself in a reduced death-rate, and more palpably in the fact that, though the population had increased between 1881 and 1891 from 53,842 to 68,639, the demand for school accommodation was almost stationary. Thus far the change in constitution has had an apparently favourable influence on the death-rate, but if it continue to operate it will lead to an accumulation of persons over forty-five years of age and be followed by a steady rise in the death-rate, however excellent the sanitary condition of the district may be, when the authorities will be as eager as they are now unwilling to have the recorded death-rates "corrected."

MEDICAL CERTIFICATES FOR THE LONDON BOARD SCHOOLS.

AT a recent meeting of the London School Board a report of the school management committee was adopted to the effect that three medical men should be appointed to examine cases in which medical certificates were produced to account for non-attendance at school. Whether it is supposed by the members of the Board that medical certificates are forged by parents who desire to keep their children from school we are not informed; but that seems hardly likely to be the explanation, for the detection of a forgery would not require the services of a medical practitioner. It is, indeed, hardly possible to avoid the inference that the Board has thus put a slight upon the medical profession by affirming the necessity for the supervision of the certifying medical practitioners in respect of this trivial matter of school attendance. We are sorry to be driven to this conclusion, and we feel that in view of it we may fairly invite the majority of the School Board to reconsider their decision. The men whom they refuse to trust in this small matter are the same men to whose absolute discretion and approved skill the weightiest matters are unreservedly entrusted both by law and the custom of society. It is something new and by no means agreeable to the profession at large to have a

municipal body arrogating to itself the right to appoint overseers and to criticise in this way the discharge of our professional duties, and we may add that such interference actually attempted would not only provoke strong and just resentment on the part of the medical men, but would certainly result in the adoption of measures to make that sentiment effective. Upon this point the Board would seem to be very vulnerable, seeing that Mr. Diggle has pointed out that the Board has no power to enforce the presentation of a medical certificate at all. To give it, therefore, is purely a courtesy on the part of the medical attendant, and if this courtesy is to be made the occasion of vexatious interference on the part of the Board all that he will have to do in self-defence will be to refuse the certificate and inform his patient that the Board has no power to exact it.

THE DIFFUSION OF SMALL-POX.

THE three weeks which have elapsed since we noticed this subject have been weeks of quiescence of small-pox in England, whilst Wales has been, practically, entirely free from the disease. In London, in the three weeks ended with Saturday last, April 13th, there were but 25 fresh cases of small-pox and not one registered death therefrom. The patients remaining under treatment at the close of any one of those weeks have never exceeded 60 in number, and were last Saturday below 50. These data are eminently satisfactory, especially in so far as the type of the disease is concerned. Both Peterborough and Bedford, which have contributed cases in the period under discussion, have apparently got rid of threatened trouble, and nearer home the suburbs have escaped also and almost without exception. In the Midlands the Manor of Aston, the city of Birmingham, and Smethwick have had experience of small-pox, but to a very limited extent, though Wolverhampton had multiple attacks last week. Derby, while registering one death, has had no fresh cases so far as we can learn. Liverpool has had but some half dozen cases, and not one death. Northward, we learn of the invasion of South Shields and Jarrow, about a dozen cases within the past month being recorded in the two towns. In Dublin, whilst matters are mending as compared with former periods, there has not been much decrease in the last fortnight and the first week of the present month, though taken collectively the total of admissions was only 58, as against 95 in the three weeks next preceding. The end of the third week of March found 58 acute cases and 100 convalescents under isolation, whilst the close of a fortnight later found only 120 under isolation, though the acute cases had risen to 63. During the three weeks there were 9 deaths, of which 2 were in vaccinated adults aged over twenty years, and 7 in unvaccinated persons, 1 aged under five and 1 under twenty, the remaining 5 being in adults aged twenty years and over.

A MATTER OF ETIQUETTE.

IN our issue of April 6th we commented upon the remarkable views held by the majority of the vestrymen of St. George's, Southwark, as to the ethics of one medical man visiting the patients of another. Dr. Waldo declined to do this without the consent of the medical man in charge of the case. The matter was referred to the Works Committee, and at the vestry meeting held on the 9th inst. the following resolution of this committee was read: "That in any case where the surveyor is of opinion any suspicion is attached to an employé he shall notify the medical officer of health, who shall accordingly visit the man, the vestry undertaking to be responsible for any irregularity in respect thereto." Dr. Waldo refused to allow himself to be compelled to commit such a breach of medical etiquette and the matter was referred back to the committee. The object of the vestry is to prevent malingering, and in this resolution the committee practically say they can trust neither their employ nor his usual medical man. We can imagine the howls of virtuous indignation which would arise if the ratepayers held a meeting and passed the following resolution: "That in any case when the ratepayers are of opinion any suspicion is to be attached to one of their employés"—we take it that a vestryman is an employé of the ratepayers—"the medical officer of health shall be notified, and shall accordingly visit the man, the ratepayers undertaking to be responsible for any irregularity in respect thereto." Vestrymen are but human; they are sometimes ill, and have been known to attend vestry meetings and committee meetings irregularly; although, being unpaid employés, the ratepayers could not adopt the suggestion of the vestryman who said: "Nothing acts so nicely on a sick man as for him to be on half-pay. It does more good to him than medicine." Dr. Waldo will have the sympathy not only of his professional brethren but of every other right-thinking man in the stand he is making for the unwritten canon which governs the relations between medical men.

THE LEICESTER BACTERIOLOGICAL INSTITUTE.

IT has on several occasions been laid down that there should be in every populous centre in the kingdom a bacteriological laboratory in which might be conducted investigations of various kinds, for the same reason that every municipality now finds it essential for its complete official equipment to have a public analyst and laboratory. Of the large Midland towns, Leicester has been the first to provide such a laboratory for the training of resident medical men and others in bacteriological methods and to make provision for the examination of pathological and bacteriological specimens. This laboratory, which has been fitted up by Messrs. J. Richardson and Co., Limited, has been placed under the direction of Dr. J. A. Turner, the medical officer of health. In the prospectus before us nothing is said as to work already done, but the objects for which the institute is established are (1) to investigate the means for preventing and treating the various infectious and other diseases, and to provide a place where original work may be carried on for this purpose; (2) to provide instruction in bacteriology to medical men and advanced students, especially for those residing in the Midlands; (3) for the diagnosis of disease by means of bacteriological and other processes; and (4) to prepare, supply, and test any protective or curative material. The scheme is sufficiently ambitious, but there can be no doubt that under energetic and judicious guidance it may be brought to a successful issue, though we think that there will have to be a little more definiteness and crystallisation of idea as regards the aims of the institute than can be gathered from the prospectus sent out.

THE HOLLOWAY SANATORIUM INQUIRY.

WE have received from Dr. Charles Mercier a letter on this subject. The letter itself is too long for insertion, and part of it refers in detail to evidence adduced at the recent inquiry held by Mr. Gully, Q.C., and Dr. Savage, on which we have purposely avoided commenting until the report of the commissioner and his assessor is published. The inquiry, it will be remembered, was held apparently as a direct consequence of an extremely violent attack made by several newspapers on the character and management of the institution generally, on the ground that in one case a coroner's jury had reported that in their opinion "the medical supervision had been insufficient, and that the mechanical restraint was excessive and too long continued." The most important part of Dr. Mercier's letter is an emphatic and dignified protest, with which we most cordially agree, against the licence of language which the writers of these journalistic articles

have employed without adducing any evidence to justify them. He quotes such phrases as: "If ever in this world a poor helpless wretch was done to death by inhuman barbarity and criminal negligence that man was T. W——. In all the blood-stained annals of modern lunatic asylums there is not to be found a more sickening and horrifying story." "It is a story of the slow torturing to death of a helpless maniac by methods the barbarity of which must be apparent to the most callous observer. The perpetration of such a crime," &c. Dr. Mercier points out that neither at the coroner's inquest nor at the recent inquiry was there any attempt to prove such abominable charges, "nor even to repeat them before the very tribunal which is constituted for their investigation." Exaggeration and profusion of abusive epithets do harm and tend to cause a reaction even when there is a good case; and where they are used from imperfect acquaintance with the subject and from hasty interpretation of facts they are sure to recoil sooner or later on those who unjustifiably employ them. The care of the insane is one of the most anxious and wearing occupations which a medical man can follow. The medical officers of our asylums are a body of men second to none for humanity and the constant display of practical sympathy. They deserve and should be able to rely on public coöperation and support in their difficult and delicate work, and we regret and deprecate extremely the gruesome language which many modern journalists allow themselves to employ when speaking of useful institutions and of the physicians in charge of them.

THE annual dinner of the Volunteer medical officers will take place at Limmer's Hotel, George-street, Hanover-square, on Wednesday, April 24th, at seven o'clock, when Sir Wm. Guyer Hunter, K.C.M.G., will preside. Those intending to be present should communicate as early as possible with Surgeon-Lieutenant Eddowes, M.D., mess secretary, 25, Old Burlington-street, W.

WE continue our report of the thirteenth meeting of the German Congress of Internal Medicine. We have before now had to criticise the proceedings at scientific gatherings on account of the obtrusiveness of the picnic element, but this Congress is, and has always been, a quiet and thoughtful meeting of medical men, and from its joint deliberations practical good has before now resulted.

WE have received the report of the inquiry held by Major Cardew into the circumstances connected with the recent explosions on Southwark Bridge. The responsibility seems, on the surface, to be about equally distributed between the Electric Lighting Company and the Gas Company: but we shall return to the matter later.

THE right carotid artery and the third part of the right subclavian artery were simultaneously ligatured on Tuesday last by Mr. Page in the Royal Infirmary, Newcastle-on-Tyne, for innominate aneurysm. This is the first time that this operation has been performed in that hospital.

Pharmacology and Therapeutics.

FLUORIDE OF SODIUM AS AN ANTISEPTIC.

La Semaine Médicale of March 20th says that fluoride of sodium has been used with success by Dr. Tuffier of Paris in cystitis, and more recently by Dr. Blaizot of Doulon-lès-Nantes, in the form of an aqueous solution of the strength of 1 in 100 or 1 in 200, as an antiseptic wash for the bodies of patients suffering from infectious disease, as a mouth wash, as a vaginal injection in chronic or subacute vaginitis, and in the treatment of erythema in newly born infants, in which it was very efficacious. It possesses the property of dissolving albuminous substances, which may possibly account for its good effects. It cleans the skin exceedingly well and gives rise to a delightful feeling of softness and coolness, both when employed externally and when applied to mucous surfaces—as, for example, when it is used as a mouth wash, for which it is eminently suitable.

PHYSIOLOGICAL AND THERAPEUTICAL EFFECTS OF CONDURANGO.

The physiological and therapeutic effects of condurango and condurangine, which is not an alkaloid but a resino-glucoside of a complex nature, have been studied by a large number of European and American observers during more than twenty years, but there is still great want of agreement amongst them.[1] The most remarkable observation on the physiological action of condurango which has been made is perhaps that of Dr. Guyenot, whose experiments in Dr. Dujardin-Beaumetz's laboratory in the Hôpital Cochin in Paris led him to believe that this drug exerts a toxic effect on the nervous system, but not until twenty-four hours after its injection into the body. This may possibly afford an explanation of the somewhat contradictory results reported by previous observers. It may be remarked that Gianuzzi and Buffalini ascribed to condurango tetanising powers. Lauder Brunton[2] found that when the preparation employed is deprived by filtration of the coarse particles of the bark no tetanic symptoms are produced, though when these are not removed the injection of the watery extract into the jugular vein causes an animal to die with opisthotonos. As to the therapeutic effects of condurango, the observations in the Hôpital Cochin fully confirm what has been stated by many observers as to its usefulness in ulcer and cancer of the stomach in relieving the gastralgia, catarrh, hæmatemesis, and vomiting, and in improving the appetite; but lend no support to the statements made by Drzewski, Burkman, Barth, and others that it actually cures cancer of the pylorus. According to R. Wagner[3] the effect of condurango on the digestive functions of dyspeptics and cancer patients is slight and inferior to that of nux vomica, while it is quite incapable of producing much effect on the gastric juice. According to Cheitsoff it is the pancreatic juice and the bile that are chiefly increased. Condurango may be administered in powder, decoction, tincture, or wine.

EFFECTS OF CURDS ON INTESTINAL PUTREFACTION.

According to K. Schmitz[4] cheese and curds as well as milk and kephir exert a marked anti-putrefactive action on the proteid matter in the intestines. This subject has been recently investigated by Dr. Guseroff[5] in Professor Chudnovski's clinical laboratory, St. Petersburg, the subjects of the nine series of observations made being all healthy and well-developed hospital employés. He found that under the influence of curds the absolute quantity of ethereal sulphates was diminished—in some instances by as much as one-half—and that the ratio of the ethereal to the preformed sulphates was increased; also that the weight of the body increased. His results point to the retardation of putrefactive processes in the intestine by curds, though whether it is really the casein or, as Schmitz is disposed to believe, the lactose which is the active agent must still be looked upon as an open question.

TANNIGEN IN ENTERITIS.

Tannin, though a very valuable and powerful drug, has, when given in large doses, so serious an effect on the stomach, producing nausea and vomiting, and, indeed, almost cauterising the mucous membrane, that its use is necessarily much restricted. Professor Meyer of Marburg, however, recently discovered a combination of tannin with acetic acid which passes through the stomach unchanged, and, therefore, without doing any injury, but on entering the alkaline intestinal tract it breaks up, tannin and acetate of potash being formed. That this has a very powerful effect on the intestine was shown by experiments on animals, and subsequently by clinical observations in Professor Müller's policlinic in Marburg, of which a short account is given

[1] Nouveaux Remèdes, Nos. 5 and 6, 1895.
[2] THE LANCET, May 3rd, 1884.
[3] Archives Générales de Médecine, February, 1892, quoted in Nouveaux Remèdes, loc. cit.
[4] Zeitschrift für Physiologische Chemie, xix., 378, and Journal of the Chemical Society, October, 1894.
[5] Vrach, March 2nd, 1895.

in an article by Dr. C. Künkler.[6] There were forty-one patients, mostly children, who nearly all suffered from chronic enteritis. Many of them had been already treated with but little success by means of naphthalin and bismuth, but they were all, as far as could be ascertained under the conditions of out-patient practice, very greatly benefited, most of them, indeed, really cured, by tannigen. Dr. Künkler recommends that at the commencement of an attack of enteritis a powerful disinfectant, as naphthalin or calomel, should be given in combination with the tannigen, and that the latter can subsequently be continued for some little time after the catarrhal symptoms have passed off in order to allay the irritability of the intestinal canal and to guard against a possible return of the attack. Tannigen, which is a yellow, tasteless, insoluble powder, must not be given in milk but in boiled water or oatmeal grouts (Hafergrütze). It has been shown to be quite harmless in doses of forty-five to fifty grains, but generally three to seven and a half grains per diem are sufficient. The children in the policlinic were ordered a grain and a half to three grains three times a day, infants a few weeks old taking the smaller dose; older children and adults were sometimes given the larger dose, and occasionally as much as seven and a half grains.[7]

SALIPYRIN IN MENORRHAGIA AND METRORRHAGIA.

The value of salipyrin in various forms of uterine hæmorrhage, which has been noticed by Zurhelle, Kayser, and Bigelow, has been very carefully tested by Dr. E. G. Orthmann by observations on thirty-two patients in Dr. Martin's policlinic in Berlin.[8] Fourteen were cases of purely functional menorrhagia. In three the menorrhagia was associated with salpingitis and oöphoritis. In the remaining fifteen the hæmorrhages were irregular, and were classed under the head of endometritis hæmorrhagica; four of these were associated with metritis, perimetritis, or oöphoritis, four more were consequent on parturition or abortion, and the rest were due to previous operations on the tubes or ovaries. The salipyrin was always given in the form of lozenges containing fifteen grains each. The patient took three daily, commencing a day or two before the hæmorrhage was expected and continuing them throughout the whole time it lasted, the total number of lozenges taken being from twenty to seventy. With respect to the results observed, in the severe menstrual hæmorrhages a marked improvement occurred in seven cases, and a complete cure was effected in two. The pain associated with the hæmorrhages was also greatly relieved. Of the four cases of metrorrhagia complicated by metritis, perimetritis, or oöphoritis two were improved, as also were all those following parturition or abortion, but there was much less success with the operation cases. Of the whole thirty-two cases twenty were more or less beneficially influenced by the treatment, the most marked success being obtained in the simple menorrhagia subsequent to parturition or abortion. In no instance were any of the unpleasant by-effects ascribed to salipyrin observed, not even when seventy lozenges were given. Dr. Orthmann thinks the results observed are quite sufficient to warrant his recommending other practitioners to give salipyrin a trial in suitable cases of uterine hæmorrhage.

LORD CROMER'S REPORT ON EGYPT, 1894.

THE British Consul-General's annual report on the finances, administration and condition of Egypt during 1894, is much shorter this year than usual, occupying only fifteen foolscap pages against twenty-one in 1893 and thirty-nine in 1890, when for the first time Lord Cromer (then Sir Evelyn Baring) drew up a comprehensive statement explaining the general progress of administrative reform. There are, however, several appendices by the head of the Public Works Department and other officials, which collectively take up about as much space as the main portion of the document.

According to his invariable custom Lord Cromer commences with revenue and expenditure, and in a few short paragraphs recapitulates the entire history of Egyptian finance since 1882.[1] Now, although as a rule questions of finance do not enter within our province, still as it is unquestionably true that money and sanitation are inextricably associated we may be excused for devoting a short space to this section. In the first place, we cannot refrain from expressing our admiration at the extremely lucid treatment by Lord Cromer of what he very rightly calls a complicated subject. It would be impossible to be more explicit, and at the same time explanatory, within reasonable limits. At the end of 1894 the excess of revenue over expenditure for the twelve months amounted to no less a sum than £E.785,000, or considerably more than three-quarters of a million sterling, the Egyptian pound being equal in value to twenty shillings and sixpence. When the estimates were framed the anticipated surplus was set down as £E.530,000, but owing to enhanced receipts and lessened disbursements "the net result was £E.255,000 better than the estimate." These figures, as Lord Cromer further observes, may be considered as very satisfactory, but unfortunately there is a reverse side to the medal. As the outcome of influences, chiefly international, which are all explained in the clearest possible manner, "the real available surplus for 1894" amounts to £E.155,000 only; the balance—"namely, £E.630,000—cannot, for one reason or another, be touched by the Egyptian Government" without the unanimous consent of the Powers, a consummation devoutly to be wished, but which, unfortunately, "there seems to be little prospect of securing."

As regards the future, with especial reference to the possible provision of any considerable sum for sanitary work, the outlook cannot be said to be encouraging. The Estimates for 1895 provide for a nominal surplus of £E.660,000, but the real surplus is not expected to surpass a paltry £E.11,000. With the exception of £E.150,000 "being part of the cost of constructing a dam near Assouan," the *status quo* of 1994 is maintained, but Lord Cromer's explanation of the reasons that compel this cheese-paring cannot be gainsaid. "The agricultural depression, coupled with the artificial embarrassments due to the international engagements into which the Egyptian Government has entered have produced a situation which renders the exercise of strict economy more necessary than ever. The execution of some public works, which would have been of great benefit to the Egyptian population, may have to be postponed. The same may be said of other administrative reforms which would involve an increase of expenditure. If prices fall still further the difficulties of the situation will naturally be aggravated, but at present I see no reason for alarm in connexion with the financial situation. Nothing has as yet happened to inspire doubts as to the continued solvency of the Egyptian Treasury. The Egyptian Government, in spite of the international engagements by which its freedom of action is curtailed, should be well able to deal with the present difficulties of the situation."

In common with all who wish well to Egypt and desire to see our intervention in her affairs crowned with success, we can only bow to the inevitable and hope for better times. In this connexion the pertinency of some further remarks by Lord Cromer must be generally admitted. "It is essential that all who are in any degree responsible for the administration of Egyptian finance should bear in mind that the first and greatest interest of the people of Egypt is to maintain the Egyptian treasury in that position of assured solvency which, after great efforts, was secured only a few years ago. Any measures which would endanger that position, or which would in any way shake the credit of Egypt, are strongly to be deprecated. The revenue must be made to balance the expenditure. The commencement of a new floating debt is above all things to be avoided."

There is no denying the cogency of Lord Cromer's contention, and yet, on the other hand, it is equally impossible to avoid thinking that the immense reserve funds which at the present moment belong to Egypt and are allowed to remain comparatively unproductive might be utilised to the utmost advantage for the execution of urgent sanitary and other works. That Lord Cromer shares this opinion is evident, but he does not care to discuss the question at length, because any remarks he might make upon it "might only serve to increase the irritation which unquestionably exists in connexion with the manner in which the subject has been treated." Amongst other important—well nigh essential—measures, the drainage of Cairo has to

[6] Allgemeine Medicinische Central-Zeitung, Feb. 13th and 16th, 1895.
[7] For Prof. Meyer's original paper see Deutsche Medicinische Wochenschrift, Aug. 2nd, 1894.
[8] Berliner Klinische Wochenschrift, 1895, No. 7, quoted in Allgemeine Medicinishe Central-Zeitung, 1895, No. 25.

[1] By an obvious error this date is printed 1892 in the report, and yet in more than one English newspaper the mistake is rather unpardonably perpetuated.

be relegated to an undated future, and yet "the redundant balances held, in one form or another, by the Egyptian Government" amounted on Dec. 31st, 1894, to no less a sum than £E.4,127,000.

Prisons.—Turning to matters more legitimately within our province, it is highly satisfactory to find the following encomium of a department that may be said to have been created by the present administrator: "In few branches of the Egyptian administration has greater progress been made during the last few years than in the prison department, of which Dr. Crookshank is the director-general. Those prisons which have been built under Dr. Crookshank's superintendence by prison labour can bear comparison with any similar institutions in Europe." This is very high praise indeed, but it is thoroughly well deserved. Crookshank Pasha has been in Egyptian employment ever since the beginning of our occupation, and at one time, because he had not performed impossibilities, he had to withstand a vast amount of adverse criticism which unhappily was not altogether confined to quarters whence it might reasonably have been expected. Tenacity and determination in a good cause are, however, not unusual characteristics among our countrymen, and in the present case these qualities were developed in a marked degree. The result is most encouraging, and we trust that at no distant date the Director-General of Egyptian Prisons may have the satisfaction of administering a department as near perfection as possible in every respect. At present, however, for causes entirely beyond the control of Crookshank Pasha, there is still much to be desired. "Overcrowding, with all its attendant evils, still exists in the provincial prisons; neither can it cease until considerable sums of money, which it is impossible for the Government to provide at present, are spent. A portion of the General Reserve Fund might very usefully be devoted to the construction of new prisons." Lord Cromer's concluding remarks on this subject will be read with interest. "The prison receipts amount to about £E.2000 a year, which are employed in improving and extending existing prison accommodation, but this is not nearly sufficient to meet the requirements of the department. I am glad to be able to add that a sum of £1500 has been granted for the adaptation of an existing building at Alexandria to the purposes of a small juvenile reformatory capable of holding from 100 to 150 boys. An institution of this sort is much required. It is impossible to go over any of the prisons in Egypt without being struck by the youth of many of the prisoners, who should certainly on every ground be separated from adult offenders." It is very much to be desired that the reform here indicated should be extended so as to embrace the entire country. The herding of juvenile offenders with hardened criminals cannot but be productive of the most serious consequences. Egyptian children as a rule are bright, intelligent, and well disposed; if preserved from evil associations the majority of the youthful delinquents would doubtless grow up into reputable members of the community. Quite recently we heard of a society that was got up under British auspices for the protection of Egyptian donkeys and horses, a most desirable object no doubt; but would it not be better if the benevolent people who want to benefit Egypt were to direct their energies and their subscriptions towards some scheme for the amelioration of their own species? A Juvenile Rescue Association for Egypt would have ample scope, and if well directed could not but be productive of a vast amount of good.

Sanitary Department.—Here, too, Lord Cromer apportions praise in no stinted fashion. "The remarks which I have made in respect to the Prisons Administration apply equally to the Sanitary Department. Under the intelligent direction of Rogers Pasha much progress has been made. New dispensaries have been opened. The number of patients treated in Government hospitals has increased. An infectious diseases hospital at Cairo has been completed. An English specialist is about to be placed in charge of the lunatic asylum. Three new hospitals at Damanhour, Fayoum, and Beni-Souef are in course of construction. Slaughter-houses are being built in several provincial towns. A Vaccine Institute has been completed. Sixty-six mosques have been placed in a sanitary condition; 121 cemeteries have been dealt with under the Cemetery Decree passed in January, 1894." All this indicates considerable progress and is very satisfactory as far as it goes, though, of course, as Rogers Pasha would be the first to admit, the general insanitary condition of the country remains practically unchanged. All comes to those who know how to wait, however, and perhaps in time the Director-General of the Sanitary Department may be given the means to accomplish the thorough cleansing of Egypt. It is certainly true that the thin end of the wedge has been inserted. The sanitation of mosques and cemeteries is an undoubted indication of better things to come, and Lord Cromer's last observation in this section, though vague, is encouraging—"It is to be hoped that some portion of the General Reserve Fund will be eventually devoted to sanitary improvements." Elsewhere the Consul-General writes: "But the department is much crippled for want of funds. Thus Rogers Pasha writes to me: 'It is an undoubted fact that the population is beginning gradually to appreciate the advantages of medical institutions, whether hospitals or dispensaries. Demands are now constantly made for the creation of new dispensaries and hospitals throughout the country, and it is a matter of the deepest regret that the resources of the department should be so limited as to prevent these demands being complied with.'"

When the Egyptian Government dispensaries were first started in 1887 a mistaken idea seems to have prevailed that it was hoped to make money by them. Even Rogers Pasha seems to have entertained this opinion, for in his first annual report (1892) he writes: "The dispensaries of the country are worked at a loss. ..... The general failure of the dispensaries." The idea really was to vulgarise—as the French say—the knowledge of European modes of treatment amongst the *fellahin*, and in this way help in the general work of reformation. The budget allotted to the Sanitary Department did not admit of the multiplication of hospitals, so the dispensaries were adopted as a sort of compromise. It is very satisfactory indeed to find now that the population is beginning to value these much criticised institutions and that their number is being added to.

VENEREAL DISEASE AND SANITATION AT DOVER.

IN respect to the prevalence of venereal disease among the troops and the attending social circumstances, it would be difficult to find a greater contrast than that afforded by the town of Dover as compared with Aldershot. At the latter town, as already explained in these columns,[1] much of the trouble is due to the fact that the soldiers start from there for foreign service, and that Aldershot is the place where soldiers who have married without leave are too often compelled to abandon their wives. These women, being generally without resources, often drift into prostitution. The soldiers quartered at Dover have, on the contrary, returned from foreign service, or else are young recruits sent there to fill up vacancies in the regiments. Also Dover is a much larger town, and offers much better prospects of employment for any soldier's wife abandoned by her husband. Then Dover possesses charitable institutions which cannot be created in so small a town as Aldershot. Lady William Seymour, for instance, takes very active interest in all that affects, directly or indirectly, the families of the soldiers. No soldier's wife is known to be in distress at Dover, and as the help given is not State help, but organised by private charity, no distinction would be made between women married with or without leave to soldiers. Such a woman, if abandoned, would certainly be helped to return home; and among the women on the town none are known to be soldiers' wives. Nevertheless, there is a great deal of immorality, and one-third of the soldiers in the hospitals are suffering directly or indirectly from venereal disease. Yet even this state of things is considered an improvement on the past. Here, as at Aldershot, everyone agreed that the tone of the rank and file had greatly improved. The men were better educated, cleaner, and more sober. The increase of sobriety is an important factor. When soldiers suffering from venereal disease are questioned they generally connect their illness with some bout of drunkenness; otherwise, they maintain, they would have been able to resist the allurements of the women in the streets.

In spite of this more favourable state of affairs regret is very generally expressed that the Contagious Diseases Acts

[1] THE LANCET, March 30th, 1895.

were abolished. The police especially lament the deplorable effects produced on the conduct and morality of shop girls, servant girls, and other young women which result from the abrogation of these Acts. Formerly, if a young girl was seen constantly in the streets besporting herself with soldiers the police would call on her parents and warn her in their presence. Now the police are absolutely powerless and are obliged to witness scenes which they know full well must generally culminate in immorality without being able even to remonstrate. But the town authorities, especially during the last twelve months, have been displaying more than usual severity in prosecuting the owners of disorderly houses. Much controversy prevails in the town as to the wisdom or otherwise of such action, which may certainly drive the evil more under the surface, but is less likely to diminish its extent. The effect of such prosecutions, it is argued, may act as a restraint on women. If, as some alleged, the Contagious Diseases Act encouraged men to immorality, it certainly had the effect of checking women; and it is now proposed to attain the same end by the alarm which the publicity given to the prosecution of a disorderly house naturally creates. Should, however, this policy prove successful, it will only accentuate that grievance which has so much increased since the abolition of the Acts, and which is now the principal subject of complaint. The fact is that soldiers are less and less inclined to frequent regular prostitutes, but this does not mean that they are any the more virtuous. It means that they court a more respectable class of girls, and thus a countless number of shop girls, work girls, but more particularly of servants, become their mistresses. On this phase of the question a great deal of evidence can be obtained at the homes for fallen women. About a year ago a petition was sent from a home for fallen women at Dover to the military authorities with the initials and particulars of all cases given. These statistics showed that during the previous seven years on an average three out of every four women assisted had been seduced by soldiers. Whether it be a coincidence, or whether some special measures were taken, it so happens that since this statement was made the proportions have completely altered; for out of 37 women received in 1894 only 11 had been seduced by soldiers, and out of the children born 9 were attributed to civilian and only 5 to soldiers. It is generally the youngest and the most inexperienced girls who are the most easily led astray by soldiers, and for them especially the Contagious Diseases Acts were a terror and an effective check. In the discussion that arose on this subject at the International Congress of Hygiene held in London in 1891 it was stated that at the Chatham Lock Hospital 58 per cent. of the women were only sixteen years old; and that the magistrates of that town certified that in spite of the Criminal Law Amendment Act juvenile prostitution was more common since the abolition of the Contagious Diseases Acts. The Poor-law guardians coincided in this opinion. At Dover we were able to obtain details concerning 72 women who had been assisted at a home for fallen women and who had all suffered from syphilis. One of these girls had primary syphilis when she was only thirteen years old. Another had secondary syphilis at the age of fourteen. Another was seduced when thirteen years old, had secondary syphilis when fourteen, and gave birth to a child when fifteen years old. A fourth was violated by her grandfather when eleven years old, was sent to the workhouse, which she left when fourteen, and then contracted primary syphilis; at sixteen she suffered very severely from secondary syphilis, and, though not cured, is now walking the streets of Dover. All these five girls are now well-known Dover prostitutes. Four other girls were fifteen years old; 3 had primary and 1 secondary syphilis; 1 of them gave birth to a child while ill. Eight girls were sixteen years old; 6 had primary and 2 secondary syphilis. At seventeen years 3 had primary and 5 secondary syphilis. At eighteen years 4 had primary and 1 secondary syphilis. At nineteen years 5 had primary and 1 secondary syphilis. At twenty years 8 had primary and 3 secondary syphilis. Thus, out of a total of 72 cases no less than 46 were minors and 8 were under sixteen years of age. Several of these women gave birth to syphilitic children; many of them are now in the streets of Dover. It is well known that they have not been efficiently cured, yet nothing can be done to prevent their spreading the disease among the troops and the civil population. Some persons have expressed the desire to see syphilis placed among the infectious diseases for which compulsory notification is obligatory. It is not necessary to insist on the impracticability of such a measure. Legislation based merely on sentimental and moral grounds is not likely to meet with much approval. All the State can hope to do is to regulate unwholesome industries, and a woman who earns her living by immorality is pursuing an unwholesome industry that endangers the health of the community, the sufferers being not only the guilty, but also many innocent children, wives, and others. That her victims are in the first instance also guilty of offending against good morals is not the point at issue, since such purely moral offences are not punished by the law. But the law does try to check the spread of disease. The law does regulate and inspect unwholesome industries. There is no law affecting the consumer of bread or of milk, but there are many laws on bakehouses and on dairies. It will be said that the question of morality is not involved in these trades; yet it is wrong, it is opposed to our sense of moral rectitude, to make bread or sell milk under conditions likely to cause ill-health; and it would be equally wrong to encourage such trades by purchasing bread or milk under unwholesome conditions. The law, however, finds it most practical to deal only with the person who trades, who sells, and not with the purchaser. Now there are women in the streets of Dover who are known to be diseased who obtain their living by means that spread this most serious disease; and though a milkman who kept his milk near an open drain would at once be prosecuted nothing can be done against these women. In the meanwhile, the British taxpayer has to supply an enormous sum for the maintenance of an army, though the effective strength of this force is very considerably reduced by the prevalence of venereal disease among the soldiers.

In respect to general sanitary matters Dover again affords a complete contrast to Aldershot. The ground, far from being new, has been inhabited for centuries. But if for ages the soil had been contaminated it was one of the first towns in England to avail itself of the Sanitary Act of 1848. When this law was enacted the corporation at once set to work to replace the tub system then in vogue by a general system of drainage. Though there was not in those days half the present population Dover spent £80,000. To overcome the insufficiency of level a pumping station was established in the lower part of the town, which raised the sewage so that it can flow into the sea by gravitation. It is, however, only necessary to pump two hours before and two hours after high tide. The outfall is between the Admiralty Pier and the Shakespeare Cliff, and its length has been extended several times. The original loan raised for drainage purposes was paid off thirty years ago, and Dover boasts of being not only one of the first towns to adopt the system of drainage, but also of having been the first to pay off its debt. The waterworks are likewise a municipal enterprise. Wells were sunk in the chalk near the Castle. The water is pumped up into a reservoir. It is very pure water, but rather hard. No method, however, is employed to soften it. There are hardly any wells in the town, and those that have been found are closed on the ground that they contain foul water. The supply is equal to 6 000 000 gallons per week, and the water-rate is not high—about 13s. on a rateable value of £48. This brings in about £4000 a year, and of this a good half is net profit. Formerly there used to be taps over the water-closets, and these were often left running all night. Then the water-supply would fall short, and the sewer air entered the pipes. A large number of inspectors had to be appointed. They succeeded in preventing this waste, and the town was able to give a constant supply to all the houses.

When the borough was extended a very considerable increase of rain-flow was taken into the main sewer that runs inland up the valley. Here there is a great deal of subsoil water, which even in dry weather half fills the main sewer, and is useful in diluting the sewage and in flushing the sewer. But the surface rain water is in a great measure drained into a stream that passes through the centre of the town. The rainfall from the back yards and the back portion of the roofs of the houses goes into the sewer; but the rain water from the streets and the front roofs is conveyed by surface-drains to the stream. The worst and most difficult part of the drainage of Dover is that of the streets running parallel with the beach. From the corner of East Cliff to Hawkesbury-street, where the pumping station is situated, the distance is 5300 feet. The East Cliff corner is 25·5 feet above the Ordnance Datum, and Hawkesbury-street 14·3 feet. Indeed, throughout the central part of Dover a fall of scarcely more than 10 feet can be

obtained. Here some alterations will have to be effected. Self-cleansing sewers cannot be obtained under such conditions. As it is there are often small floods in and about the pumping station. But it is probable that all the houses in this neighbourhood will be pulled down and replaced by docks when the harbour works are more advanced. The abolition or the raising of this district will, however, make the fall of the sewers even less than it is at present. Thus an important, a radical alteration for the drainage of a portion of the town will become necessary. Works which were commenced shortly after 1848 can scarcely be expected to meet modern exigencies and the requirements of the very great increase of population which has taken place since that time. It will, however, remain to the lasting honour of Dover that this town was among the first to lead the way in effecting those reforms that have so materially contributed to reduce the death-rate of the towns of England.

THE CONGRESS OF MEDICINE IN MUNICH.

(*Continued from p. 950.*)

April 2nd.

THE THERAPEUTIC ACTION OF FERRUGINOUS COMPOUNDS.

PROFESSOR BUNGE (Basle), having referred to the importance of the part played by hæmoglobin in the animal economy, said that it is very improbable that iron in the form of inorganic salts introduced into the human body by the food becomes converted into hæmoglobin by synthesis. The case is otherwise with organic ferruginous combinations such as are present in the yolk of egg in the form of nucleo-albumins, from which the hæmatogen originates. Several combinations of iron exist in milk and also in vegetables, the latter containing a considerable amount, but milk only a small quantity. This seems to be incompatible with the fact that milk contains all the elements necessary for the growth of a young organism; but this deficiency is compensated in young animals by a very large reserve stock of iron derived from the placental circulation, and when this stock is exhausted they instinctively begin to take vegetable food. The same is the case in the human subject. The iron necessary for her offspring has been in process of accumulation by the mother not only during her pregnancy but ever since her arrival at puberty. Perhaps the appearance of chlorosis is caused by the fact that the solid tissues of a woman abstract iron from the blood without giving anything in return. This compensation can only be effected by means of organic preparations of iron, which alone are absorbed; whether they are assimilated is very doubtful, and, therefore, the best way to provide the human body with the necessary amount of iron is by the dietetic use of ferruginous vegetable products. Ferruginous drugs only act by suggestion—the iron which is to be assimilated must be obtained from the market-garden, and not from the pharmacy.

Professor Quincke (Kiel) stated that he had made investigations as to the quantity of free iron in the tissues, and had found that it increases or decreases according to the chemical qualities of the ferruginous preparations ingested. According to him there are three varieties of iron compounds present in the human body: (1) that in the tissues; (2) the reserve stock; (3) that in the circulation. Ferruginous preparations he divides into six classes: (1) ferrocyanic combinations, which have no influence on the organism; (2) blood, which is usually held in reserve, but may be usefully given in anæmia; (3) diluted hæmoglobin; (4) citrate of iron, which does not coagulate albumen; (5) insoluble combinations, which, if subcutaneously injected, are in course of time absorbed; (6) the other oxides and suboxides of iron. These form albuminates in the stomach and intestines, and are but slightly absorbed in the normal body; perhaps more so in anæmia, where they became directly assimilated. He is persuaded of the efficacy of ferruginous preparations, especially of the suboxides and albuminates; but is not of opinion that organic compounds are preferable to inorganic, the inorganic iron being changed in the intestines into an organic combination. Sufficient experiments have not yet been made on the therapeutical value of hæmoglobin. He finally remarked that drugs cannot be dispensed with in the treatment of chlorosis.

Dr. Heubner (Berlin) said that infants ought not to be fed too long upon milk.

Dr. Siegfried (Rippoldsau) thought that ferruginous medicines in conjunction with residence in mountainous localities would be successful.

Dr. Zimmermann (Basle) did not agree with Professor Bunge's opinion that the quantity of iron in the food was sufficient, and thought that suitable iron preparations were therefore necessary.

Dr. Nothnagel (Vienna) advised chlorotic patients to stay some weeks in bed at the beginning of the treatment.

Dr. Edlefsen (Hamburg) recommended the administration of hydrochloric acid with iron preparations.

Dr. Ewald (Berlin) thought that this combination should be used only when the gastric hydrochloric acid was ascertained to be deficient.

April 3rd.

THE DEBATE ON THE ANTITOXIN TREATMENT OF DIPHTHERIA.—(*Continued.*)

Dr. Treupel (Freiburg) reported that he had made injections of 200, 600, 1000, and 1500 antitoxin units on rabbits and dogs. Their general state, the temperature, the respiration, and the blood pressure remained normal; skin eruptions or changes at the places of injection were not observed. In the urine there was for some time after the injection a small quantity of albumen, but no microscopical elements, such as casts. It is probable that the albumen in the urine consists of albumose or peptone. It is doubtful whether albuminuria is a constant symptom after the injections, whether it is special to antitoxin, or whether it depends merely on the injection of blood serum in general.

Dr. Siegert (Strasburg) had concluded from his experiments: (1) that the injection of antitoxin produces albuminuria, diminution of the quantity of urine, and increase of its specific gravity, these symptoms being more aggravated when the kidney is irritated; (2) that the injection of carbolic acid causes no albuminuria, but an increase of the diuresis and of the specific gravity; (3) that an injection of carbolic acid diminishes the effect of antitoxin; (4) that an intravenous injection of 10 cubic centimetres of antitoxin No. II. is very well tolerated by healthy rabbits; (5) that a subcutaneous injection of defibrinised horse serum kills a rabbit in from two to four days, the changes in the urine being the same as after antitoxin injections; (6) that a subcutaneous injection of 10 cubic centimetres horse serum with carbolic acid produces the same changes, but the animals do not die. Dr. Siegert declared that he was far from asserting that these results would be repeated in the case of the human subject.

Dr. Vierordt (Heidelberg) was not of opinion that the course of the fever in diphtheria, as suggested by Dr Heubner, has anything characteristic. He ranked himself among those medical men who reserve their judgment as to Behring's methods.

At this point the discussion was closed, and Dr. Heubner's motion, given at the end of the report of the first sitting, was adopted.

April 4th.

THE PATHOLOGY AND TREATMENT OF TYPHLITIS.

Professor Sahli (Berne) described typhlitis and perityphlitis as inflammations which arise from the interior of the intestine and in course of time attack the walls of the cæcum, the vermiform appendix, and the surrounding tissues. This infection is caused by the presence of pyogenic bacteria in the cæcum. The marked swelling in perityphlitis results from an infiltration of the tissues round the cæcum, the vermiform appendix, the peritoneum, the omentum, and the fascia transversalis. This swelling becomes still more increased by the accumulation of fæces. Every case of typhlitis with palpable swelling is attended by suppuration, but these cases nevertheless often recover, the pus partly being absorbed and partly finding its way spontaneously into the interior of the bowel. The disease at the outset should be treated by opiates and absolute rest, together with total abstinence from food. When there is no improvement within three days an operation becomes necessary. An immediate operation should only be performed if the patient suffers from continuous fever, if he is seized with shivering, and if the temperature and the pain suddenly increase after an apparently favourable initial stage of the disease. To avoid relapses the vermiform appendix must be removed, even if the pus is spontaneously evacuated into the intestines.

Professor Helferich (Greifswald) said that the presence of pyogenic bacteria produces purulent catarrh of the mucous membrane of the cæcum; and if the mucous membrane is abraded by the passage of fæces the resulting suppuration

easily penetrates through its walls. As soon as the symptoms of suppuration—fever, pain, and sweating—are recognised an operation should be performed. It would be wrong to wait till the abscess becomes palpable or to rely on the possibility of spontaneous cure. Above all, the symptoms of approaching perforation of the peritoneum should be attentively observed. Appendicitis, of course, is often present without any grave symptoms and only becomes manifest by a sudden aggravation of the patient's general state.

Dr. Sonnenburg (Berlin) made a distinction between simple and purulent appendicitis. The former he has observed in twelve cases post mortem; it is characterised by the absence of all grave symptoms affecting the temperature and the pulse, and by a short and mild course. These cases should be treated expectantly. Purulent appendicitis, which begins with shivering, vomiting, diarrhœa, severe pains, &c., should be operated on. Where the abscess has opened through the intestine the vermiform appendix must be removed.

Dr. Curschmann (Leipzig) stated that in his experience the mortality was at the rate of 5·4 per cent. in 452 cases. He did not agree with Professor Sahli that all cases were purulent. There is also a sero-fibrinous exudation. The swelling in perityphlitis often arises from accumulation of fæces, sometimes also from a matting together of the infiltrated tissues. He declined to give general rules for operating, for in this disease it is essential to take into consideration the circumstances of each case.

Dr. Aufrecht (Magdeburg) said that cases should be distinguished according to the site of the exudation. The disease is less dangerous when the exudation is merely extra-peritoneal, and much more dangerous where there is phlegmonous infiltration of the tissues behind the cæcum. In the latter case an immediate operation is necessary, but in the former it is permissible to wait till an abscess results.

Dr. Quincke (Kiel) thought that accumulation of fæces is seldom a cause of real typhlitis. Very often the administration of an enema effectually relieves the patient. This treatment, of course, should only be used when no alarming symptoms are present.

Dr. Augerer (Munich) reported some cases where after a comparatively short time symptoms of grave ileus appeared. The post-mortem examination only showed a small intumescence.

Dr. Sonnenburg remarked that he had also seen cases of this kind. He was of opinion that these symptoms arise from an autointoxication of the body by bacteria.

Dr. Heubner (Berlin) stated that in such cases even a very early operation had not succeeded in averting the death of the patients.

April 5th.

SUBCUTANEOUS NUTRITION.

Dr. Leube (Würzburg) said that for this method of nutrition only fatty substances are suitable. In order to show that fat is really absorbed and assimilated Dr. Leube injected fifty grammes of butter under the skin of emaciated dogs. After the injection fat was once more found to be present in the subcutaneous tissues and in the internal organs of the animals. Chemically it proved to be partly the natural fat of the dog and partly butter. When the animals were kept without food it again disappeared, so that it had evidently been consumed like the natural fat of the body.

THE ABSORBENT POWER OF THE RECTUM.

Dr. Posner (Berlin) reported that he had injected solutions of aniline colours into the rectum of rabbits, and that in from twelve to fifteen minutes they were totally absorbed. This fact should make physicians very cautious in giving drugs by the rectum.

Dr. von Ziemssen and Dr. Riper agreed with Dr. Posner. Dr. von Noorden recommended the administration of quinine by the rectum in whooping-cough.

OTHER PAPERS.

At the final sitting Dr. Rumpf (Hamburg) read a paper on the treatment of Enteric Fever by injections of cultures of the bacillus pyocyaneus. His experiments were of course made on animals only.

Dr. Thoma (Magdeburg) made some observations on the Elastic Tissue of the Arterial Walls and on Angeiomalacia.

Dr. Noorden described a new means for the early diagnosis of Diabetes Mellitus. He administers glycose to patients who either from natural or hereditary predisposition are suspected to suffer from diabetes, and if this substance appears in the urine the case must be treated as diabetic.

Dr. Ott spoke on Nucleo-albumins.

Dr. Dehio (Dorpat) discussed Cardiac Myofibroma and its clinical symptoms.

Many other papers were also read before the Congress, which exigencies of space compel us reluctantly to leave unrecorded in our columns.

The arrangements made for the comfort of the visitors were excellent, and the reception on behalf of the profession of Munich was very cordial. It was a subject of general remark that a very great number of visitors came not only from the German Empire, but also from Austria, Switzerland, the Russian Baltic provinces, and other countries where German is spoken.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On the water-supply of the Parish of Lympsham, by Mr. T. W. THOMPSON.—This inquiry was undertaken owing to a complaint by the county council of Somerset to the effect that the then existing rural sanitary authority of Axbridge had failed to provide the parish of Lympsham with a proper water-supply. The parish is a scattered one. The water-supply is derived from certain wells, and also to a large extent from ponds, ditches, &c.; and so scarce or bad is it at times and in certain places that some people send out of the district for a supply which is brought in by water-carts. Of the wells Mr. Thompson says that they are of a generally unsatisfactory character; they contain mere surface water, and they are situated in such proximity to drains, privies, cesspools, and highly polluted ditches that they cannot fail to become contaminated. Even the so-called parish well is situated in a grass field which is occasionally manured, and it has within about ten yards of it an offensive and almost stagnant ditch, into which a privy and the drainage of a cottage discharge. It would be bad enough if the Lympsham people were content with such water for their own consumption and purposes, but they palm it off on others and make money out of the transaction. Thus dairy-farming is the principal local industry; milk is largely produced there, and it is either distributed to large towns or made into cheese. Everyone knows how large a share water-supply has to do with such operations, and it is well, as far as Lympsham is concerned, that it should also be known that even where Lympsham dairy farmers take the trouble to send elsewhere for their drinking-water, and thus evidently admit the unfitness of their local supply for dietetic purposes, they were found to be using that local supply for "dairy operations," including a so-called cleansing of milk-vessels. In one case cans were "cleansed" with water from a dry-steined well alongside a pig-yard. But perhaps the most unsatisfactory circumstance in this Lympsham inquiry is the weak attitude adopted by the now happily defunct rural sanitary authority, who, having had several schemes of water-supply under consideration, and having informed the Local Government Board that one scheme had been found not only the least expensive, but the most feasible, practically say that because the parish have rejected it they dare not proceed unless the scheme is "ordered to be carried out." We can only hope that the new district council will hold a higher view as to its duties, and that in the evidence before them they will take away the reproach of Lympsham and of those of its inhabitants who imagine that a water-supply which is subject to the constant risk of very filthy pollutions is good enough for a parish which thrives on transmitting dairy products to neighbouring populations, and does not hesitate to use such water in the various operations necessary to the preparation of those products.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Whitechapel Urban Sanitary District.—The condition as regards nationality of a considerable proportion of Whitechapel may be judged by Mr. J. Loane's remark that "a stranger coming into some of the streets of Spitalfields might be excused for doubting that he was in the capital of England at all"; and it appears from Mr. Loane's current report that in 1894, 1046 foreigners were added to the Whitechapel population. The birth-rate of the district was a high

one—i.e., 40·3 per 1000, as against a rate for the whole metropolis of 30 per 1000. The general death-rate for the district was in 1894 20·3 per 1000, that in the model dwellings was 18·3 per 1000, and the zymotic death-rate in the same buildings 3·8 per 1000. Mr. Loane states that he finds considerable difficulty in carrying out the provisions of the Housing of the Working Classes Act, 1890; the magistrates, he thinks, do not exhibit any sympathy towards the Act in question. Mr. Loane's report embraces the reply of the Whitechapel Sanitary Committee to Dr. Hamer's report on the sanitary condition of Whitechapel, and we are glad to see that the sanitary authority have decided to add two more inspectors to their staff.

Saltburn-by-the-Sea Urban Sanitary Authority.—Dr. W. W. Stainthorpe, in his current report for the district, records an interesting, and in a certain degree an amusing, conflict of interests which took place between his sanitary authority and the Cleveland Water Company. This company issued notices to a large number of its customers ordering that the water waste preventers flushing the waterclosets should be so reduced in capacity as to supply only two gallons of water to each flush. The sanitary authority, being advised of the insufficiency of two gallons, endeavoured to persuade the water company to rescind their order, and waited as a deputation upon the company. The directors, however, refused to repeal their order, and the sanitary authority thereupon issued a circular intimating to the water consumers that, inasmuch as the water company declined to allow a sufficient flush, it was desirable that the consumers should flush their closets *before* as well as after use. We are afraid that this alternative will hardly be equivalent, from the point of view of utility, to the three-gallon flush after use, but possibly it may have the effect of bringing about a compromise with the company. At all events, this is a further illustration, if such be needed, of the undesirability of water-supplies being in the hands of companies instead of sanitary authorities.

Carlisle Urban Sanitary District.—Mr. William Brown, in his last annual report, states that among the prosecutions instituted during the year for the exposure of food unfit for consumption was one having reference to two salmon affected with a salmon fungus (saprolegnia ferax). The defence set up by the defendant was based in the main upon a statement contained in the twenty-first annual report of the inspector of salmon fisheries that "the salmon disease appears to be a purely cutaneous affection, and the fish appear to die partly from irritation and consequent exhaustion and partly perhaps from the drain on their resources caused by the production of so large a mass of vegetable matter at their expense. The flesh of a diseased salmon, however extensive the morbid affection may be, presents no difference in texture or colour from that of a healthy fish, and those who have made the experiment declare that the flavour of a diseased fish is as good as a healthy one." As it appears that both the condemned salmon had numerous "discharging surfaces" on various parts of their bodies we are glad to see that no one else was allowed to make a further experiment and that the defendant was heavily fined.

St. Ives Urban Sanitary Authority.—Mr. J. M. Nicholls' annual report for 1894 indicates that some progress has been made in the sanitary condition of St. Ives during the year. Among the improvements either accomplished or in progress may be mentioned a new scheme for draining the town, a better system of scavenging, a new water-supply, and the adoption of modern by-laws. We note, however, that the scavenging is entrusted to a contractor, and that the district possesses neither an isolation hospital nor a disinfecting apparatus. Mr. Nicholls, in referring to the Adoptive Acts, apparently includes among them the Dairies, Cowsheds, and Milkshops Order. We may point out, as we have done on several other occasions, that the Order is in no sense adoptive, but that its provisions are obligatory upon all sanitary authorities. Perhaps, however, Mr. Nicholls is referring to the adoption of regulations under Section 13 of the Order.

Maldon Rural Sanitary District.—Dr. Thresh records, in his 1894 report for this district, two cases of diphtheria in which the evidence pointed to a cat as the source of infection. The two patients were seen to be nursing a cat in a dying condition, and two or three days later both were attacked with diphtheria. Unfortunately the cat was killed and buried before any opportunity of a bacteriological examination offered itself. Dr. Thresh, in the report before us, reminds the Maldon rural sanitary authority that the sewage outfall of Burnham is near the oyster beds, and that the sewage is discharged into the river without filtration or treatment of any kind. Dr. Thresh expresses the opinion that there is danger in discharging crude typhoid-infected sewage near the beds in which oysters are fattening. Out of nine cases of typhoid fever notified from the Maldon rural district during 1894 no less than seven occurred at Burnham. Out of the seven cases referred to, two were oyster dredgermen, one was a night watchman on the oyster beds below the sewage outfall, and one was a nightsoil driver working at Shoeburyness.

Waltham Holy Cross Urban Sanitary District.—Mr. J. Damer Priest suggests in his report the desirability of making by-laws in regard to the keeping of poultry, rabbits, &c., in confined backyards. The water-supply of the district seems to be far from satisfactory, a large number of wells in it being polluted. The mains of the East London Water Company are, it seems, laid in almost every street, and it would appear that the sanitary authority which preceded the present district council were far from energetic in carrying out the provisions of the Public Health Act, 1875, in the matter of water-supply. Doubtless the new council will rapidly make up for the apathy of their predecessors.

Newton Abbot Rural Sanitary Authority.—Mr. W. Harvey supplies in his report on this district an account of the outbreak of water-borne typhoid fever which occurred in Lustleigh in 1894. The house in which the first case, an imported one, was treated was a detached one situated in a large garden traversed by a mountain stream supplying cottagers lower down with water. The stream in question became specifically polluted, probably by waste water in which infected linen had been washed, and conveyed the disease to the cottagers drawing their supplies from the stream. Curiously enough, the people in the cottages below the first infected house complained that the water of the stream had an odour of carbolic acid. The sanitary authority had not, it appears, been without due warning of the danger to which this unprotected stream was liable, as a few years ago an outbreak of diarrhœa, described as almost of choleraic intensity, occurred in the same row of cottages as that now in question, and had its origin in the same water-supply. Wiser counsels have at last prevailed, and the stream has now been piped. There will, Mr. Harvey remarks, be no more epidemics from this cause.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6105 births and 4160 deaths were registered during the week ending April 13th. The annual rate of mortality in these towns, which had declined in the five preceding weeks from 35·0 to 23·4 per 1000, further fell last week to 20·5. In London the rate was 19·3 per 1000, while it averaged 21·4 in the thirty-two provincial towns. The lowest rates in these towns were 14·0 in Swansea, 14·1 in Croydon, 16·1 in Portsmouth, 17·3 in Huddersfield, and 17·8 in Halifax; the highest rates were 24·6 in Manchester, 24·9 in Wolverhampton, 25·5 in Birmingham, 26·7 in Bolton, and 28·2 in Preston. The 4160 deaths included 330 which were referred to the principal zymotic diseases, against 314 and 274 in the two preceding weeks; of these, 108 resulted from whooping-cough, 68 from measles, 57 from diphtheria, 50 from diarrhœa, 26 from scarlet fever, 20 from "fever" (principally enteric), and one from small-pox. No fatal case of any of these diseases occurred last week in Wolverhampton, Derby, Huddersfield, and Gateshead; in the other towns they caused the lowest death-rates in Hull and Sunderland, and the highest rates in Cardiff, Blackburn, Plymouth, and Manchester. The greatest mortality from measles occurred in West Ham, Plymouth, Bolton, and Manchester; and from whooping-cough in Brighton, Liverpool, Manchester, Salford, Oldham, and Blackburn. The mortality from scarlet fever and from "fever" showed no marked excess in any of the thirty-three towns. The 57 deaths from diphtheria included 27 in London, 5 in West Ham, 5 in Cardiff, and 2 each in Manchester, Salford, and Leeds. One fatal case of small-pox was registered last week in Birmingham, but not one in London or in any other of the thirty-three great towns. There were 47 small-pox patients under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 13th inst., against 58, 55, and 53 at the end

of the three preceding weeks; 9 new cases were admitted during the week, against 14, 11, and 7 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 1463, against 1587, 1555, and 1519 on the three preceding Saturdays; 117 new cases were admitted during the week, against 184, 161, and 143 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had declined from 1448 to 427 in the six preceding weeks, further fell to 398 last week, and were 10 below the corrected average. The causes of 61, or 1·5 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Cardiff, Bolton, Oldham, Preston, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Bradford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the six preceding weeks from 42·6 to 24·7 per 1000, was again 24·7 last week, and was 4·2 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 20·6 in Perth and 21·1 in Edinburgh to 26·1 in Paisley and 31·1 in Aberdeen. The 714 deaths in these towns included 30 which were referred to measles, 30 to whooping-cough, 15 to diarrhœa, 6 to scarlet fever, 4 to "fever," 3 to diphtheria, and not one to small-pox. In all, 88 deaths resulted from these principal zymotic diseases, against 90 and 74 in the two preceding weeks. These 88 deaths were equal to an annual rate of 3·0 per 1000, which exceeded by 1·4 the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 56, 35, and 22 in the three preceding weeks, rose again to 30 last week, of which 10 occurred in Edinburgh, 8 in Leith, and 6 in Aberdeen. The deaths referred to whooping-cough, which had been 26 and 25 in the two preceding weeks, increased to 30 last week, and included 20 in Glasgow and 3 in Greenock. The 6 fatal cases of scarlet fever exceeded the number recorded in any recent week, and included 5 in Glasgow. The deaths referred to different forms of "fever," which had been 3 in each of the two preceding weeks, were 4 last week, of which 3 occurred in Glasgow. The fatal cases of diphtheria, which had declined from 9 to 2 in the three preceding weeks, were 3 last week, all of which were registered in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 199 and 189 in the two preceding weeks, further declined to 161 last week, but were 54 above the number in the corresponding period of last year. The causes of 52, or more than 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 43·6 and 43·3 per 1000 in the two preceding weeks, further declined to 29·2 during the week ending April 13th. During the thirteen weeks of last quarter the death-rate in the city averaged 37·1 per 1000, the rate during the same period being 26·0 in London and 30·5 in Edinburgh. The 196 deaths registered in Dublin during the week under notice showed a decline of 94 from the number in the preceding week, and included 6 which were referred to the principal zymotic diseases, against 12 and 11 in the two preceding weeks; of these, 2 resulted from "fever," 2 from small-pox, 1 from diarrhœa, 1 from whooping-cough, and not one either from measles, scarlet fever, or diphtheria. These 6 deaths were equal to an annual rate of 0·9 per 1000, the zymotic death-rate during the same period being 1·6 in London and 2·7 in Edinburgh. The fatal cases of small-pox, which had been 5, 1, and 3 in the three preceding weeks, were 2 last week. The deaths referred to different forms of "fever," which had been 2, 4, and 1 in the three preceding weeks, were 2 last week. The mortality from whooping-cough and from diarrhœa showed a decline from that recorded in recent weeks. The 196 deaths registered in Dublin last week included 30 of infants under one year of age, and 74 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a marked decline from the high numbers in recent weeks. Three inquest cases and 3 deaths from violence were registered; and 75, or more than a third, of the deaths occurred in public institutions. The causes of 14, or more than 7 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

A VACANCY will shortly occur in the Principal Medical Officership at Devonport by the retirement of Surgeon-Colonel F. H. Welch. Brigade-Surgeon-Lieutenant-Colonel Riordan has been appointed Principal Medical Officer at Cork in succession to Surgeon-Colonel Maunsell, transferred to Bombay. Surgeon-Captain Forde has been transferred from York to Dublin. Surgeon-Captain Morris has been posted to Cork and Surgeon-Captain Elliot to Belfast. Brigade-Surgeon-Lieutenant-Colonel Boileau, Surgeon-Major Longheed, and Surgeon-Captain Freeman have been granted sick leave from India. The following Surgeon-Lieutenants have been posted to the stations named: Harrison, Chester; Howell, Hounslow; Lawson, Portsmouth; Steel, Chatham; Profeit, Edinburgh; Kiddle, Devonport; Stadden, Whitehead; Perry, Heaton, and Morison, Ireland; Tomlinson, Dover. Surgeon-Colonel Churchill has embarked for Madras.

ARMY MEDICAL STAFF.

Surgeon-Captain John Francis Bateson, M.B., from the Seconded List, to be Surgeon-Captain, vice J. H. Daly, placed on temporary half-pay.

INDIA AND THE INDIAN MEDICAL SERVICES.

The following are appointed the Principal Medical Officers of the four commands:—Punjab: Surgeon-Colonel R. Harvey, at present Inspector-General of Civil Hospitals. He has proceeded home owing to ill-health. Bengal: Surgeon-Major-General T. Walsh, A.M.S., at present Principal Medical Officer, Madras Army. Madras: Surgeon-Colonel C. E. McVittie (Madras), at present Principal Medical Officer, Southern District. Bombay: Surgeon-Major-General J. Warren, A.M.S., as at present. Surgeon-Colonel G. C. Ross, Administrative Medical Officer and Sanitary Commissioner, Central provinces, is appointed Inspector-General of Civil Hospitals, Bengal. Surgeon-Captain C. J. Sarkies is appointed to the Medical Charge of the Baroda Residency in addition to his duties as Medical Officer, 8th Regiment Bombay Infantry. Brigade-Surgeon-Lieutenant-Colonel W. F. Burnett, A.M.S., is appointed to officiate as Principal Medical Officer, Madras District. Surgeon-Major A. Keogh is directed to proceed from Madras to Barrackpore for duty. Surgeon-Major C. B. Maitland assumes Medical Charge of the 1st Bombay Lancers at Neemuch. Surgeon-Captain A. Stables proceeds in Medical Charge of the 1st Battalion East Lancashire Regiment, moving on Field Service.

NAVAL MEDICAL SERVICE.

Fleet-Surgeons Robert William Williams and William Graham are placed on the Retired List at their own request.

The following appointments are notified:—Fleet-Surgeon W. Graham to the *Thunderer* for service in Pembroke Dockyard. Staff-Surgeons: J. E. Penn to the *Devastation;* G. F. Wales to the *Wildfire* for the *Sans Pareil.* Surgeons: E. J. Morley to the *Pique;* C. H. Upham to Plymouth Hospital; P. H. Boyden, M.B., to the *Thunderer.*

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain James Walker Beattie, M.B., 1st Durham Volunteer Artillery (Western Division, Royal Artillery) to be Surgeon-Captain.

YEOMANRY CAVALRY.

Suffolk (the Duke of York's Own Loyal Suffolk Hussars): Surgeon-Captain R. H. Lucas resigns his commission; Henry Charrington Martin, M.D., to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Rifle: 2nd Volunteer Battalion, the Suffolk Regiment: Surgeon-Major J. S. Holden, M.D., to be Surgeon-Lieutenant-Colonel. 2nd Volunteer Battalion, the Prince of Wales's Own (West Yorkshire Regiment): Surgeon-Captain S. Johnston, M.D., to be Surgeon-Major. 1st Volunteer Battalion, the Royal Welsh Fusiliers: Llewelyn Frederick Cox, Gent., formerly Lieutenant, to be Surgeon-Lieutenant. 4th Volunteer

Pattalion, the East Surrey Regiment: Surgeon-Captain E J. Lawless to be Surgeon-Major.

VOLUNTEER MEDICAL STAFF CORPS.

The London Companies: Surgeon-Lieutenant H. W. G. Macleod, M.B., to be Surgeon-Captain.

THE CHITRAL EXPEDITION.

Our daily contemporaries have kept our readers fully acquainted with the rapid progress of events in connexion with this expedition, which has been conducted with great ardour and heroic energy, and promises to have a dramatic ending. People in this country can have but a faint idea of the almost insurmountable obstacles and difficulties of a campaign of this nature. The march of Sir Robert Low's force has so far been a very arduous one; the natural obstacles have made strong demands upon its physical energies and engineering skill, to say nothing of the opposition from hostile tribesmen. The Malakand, Kotgala, and Kamrani passes have been traversed and the Swat river crossed, and a number of other difficult passes and physical obstacles have still to be encountered and overcome before the march to Chitral has been accomplished. Meanwhile another portion of the Relief Expedition—the troops from Gilgit—under Colonel Kelly and Captain Borrodaile, in spite of the intense cold, violent snowstorms, and numerous cases of frost-bite and snow blindness, have succeeded in a brilliant march and military undertaking by advancing over the Shandar Pass, which is 12,000 ft. high and some ten miles distant from a peak of an altitude of 21,000 ft. The enemy was encountered and defeated near Gasht, our garrison at Mastuj has been relieved, and Colonel Kelly's force is now probably fast advancing on Chitral itself or has already reached it. The loss of Colonel Battye, who was killed while in command of the Corps of Guides in their fighting retreat towards the broken bridge over the Panjkora, will be deeply regretted. We believe we are correct in saying that no less than three of his brothers had previously lost their lives in the field in Indian warfare. The health of the troops, apart from the cases of frost-bite and snow-blindness to which we have alluded, is understood to be excellent, and the wounded are doing well. From all accounts it would seem that, as Umra Khan's brother is a prisoner, Umra Khan, who is stated to be suing for peace, will himself soon be compelled to yield. There is every prospect of the expedition being soon terminated satisfactorily, but let it end how it may it will prove, we suspect, to have been an enormously expensive one to the Indian Government.

THE VOLUNTEER MEDICAL STAFF CORPS AT NETLEY.

The London companies of the Volunteer Medical Staff Corps arrived at Netley on the evening of April 11th for their annual training at the Royal Victoria Hospital. The advance party arrived on the previous afternoon. The strength was as follows: six officers and 195 non-commissioned officers and men, of whom twenty were bandsmen. One-half of the men present were students of medicine from the various London hospitals. The officers at the training were Surgeon-Lieutenant-Colonel A. T. Norton, V.D., F.R.C.S. (senior surgeon to St. Mary's Hospital), commanding; Surgeon-Captain D. M. O'Callaghan, A.M.S., adjutant; Surgeon-Captains J. E. Squire, T. H. Openshaw (assistant surgeon to the London Hospital), and W. E. Raw, and Lieutenant and Quartermaster Pilling. Between Good Friday and Easter Monday, in addition to ward and sentry duty, the parades, drills, inspections, &c., two lectures were delivered by Brigade-Surgeon-Lieutenant-Colonel Evatt. On Saturday he chose for his subject "The Reason for the Existence of the Volunteer Medical Staff Corps," and on Monday "The Duties of the Medical Staff Corps in the Field," showing the various stages in the transport of the wounded from the fighting line to Netley Hospital. The Volunteers left Netley for London on Monday evening. During the time of the training the weather was very bright, with a north-east wind prevailing. The companies presented a very creditable appearance.

SMALL-POX IN CALCUTTA.

An epidemic of small-pox is prevailing in Calcutta at the present time, and it is stated that no less than 20,000 people have been vaccinated in Calcutta during the past month. Dr. Simpson, the health officer, has applied to the municipality for the use of two houses in addition to the existing accommodation to convert into small-pox hospitals, one for natives to consist of fifty beds, and the other, of twenty beds, for Europeans.

The Queen's Birthday will be celebrated in London alone on Saturday, May 25th, and at all other stations, naval and military, on the preceding Friday.

Correspondence.

"Audi alteram partem."

"THE WOMEN'S FREE HOSPITAL, SOUTHAMPTON."

To the Editors of THE LANCET.

SIRS,—I had hoped to have been spared the necessity of writing to you on the affairs of the Southampton Free Hospital for Women, but I am compelled to do so by the astonishing statements made with regard to me in the letter addressed to you by the chairman and honorary secretary of the committee of that institution. In this they say: "The committee exceedingly regret having publicly to express their views on this point, but it is necessary to do so. They are of opinion that Dr. Playfair has treated them in a most discourteous manner. He listened to the accusation of the Medical Society. He never communicated with the committee or the staff of the hospital to which his name was attached, and the committee of the Women's Hospital received a letter from the secretary of the Medical Society, to whom Dr. Playfair had written, saying he strongly approved of the proposal of the Medical Society to hold a committee of inquiry."

As an answer to these indictments may I beg you to do me the favour of publishing the following correspondence:—

1.

"31, George-street, Hanover-square, W., Jan. 10th, 1895.

"To the Honorary Secretary of the Southampton Free Hospital for Women.

"SIR,—I have had sent to me a circular signed by the honorary secretaries of the Southampton Medical Society, in which they suggest that a committee of inquiry into the work and management of the Women's Free Hospital should be appointed. Will you do the favour of informing me, as consulting physician to the hospital, whether it is the intention of your committee to agree to this proposal? In my opinion it is one which should at once be carried out. When the work and management of a charitable institution such as yours have been publicly impugned full enquiry should be courted. Nothing could be better for such an institution than a favourable report from a qualified and unbiased committee of investigation. If this proposal is declined the public will naturally come to the conclusion that there is something which it is wished to conceal. I am, &c.,

"W. S. PLAYFAIR."

2.

"1, Clifton-villas, Hill-lane, Southampton, Jan. 11th, 1895.

"Dr. Playfair, Women's Free Hospital.

"DEAR SIR,—I am in receipt of your letter, which I will lay before my committee. I beg to inform you that a special subcommittee has the question under consideration, who no doubt will acquaint you with the facts of the case. Yours faithfully,

"H. C. PHILLIPS, Hon. Sec."

The promised communication never reached me, but nearly a month afterwards I learnt from another source that it had been decided not to appoint the committee I had recommended. On this I wrote as follows:—

3.

"31, George-street, Hanover-square, Feb. 9th, 1895.

"To the Hon. Secretary of the Women's Free Hospital.

"SIR,—I understand that your committee has declined to accede to the nomination of an independent committee of inquiry such as I referred to in my letter dated Jan. 10th. Under these circumstances I beg to place in your hands my resignation of the post of consulting physician to your hospital.—I am, faithfully yours,

"W. S. PLAYFAIR."

This correspondence, I think, plainly shows: 1. That it is not the fact that I "never communicated with the committee" of the Women's Free Hospital. 2. That I did not resign my post as consulting physician until after the committee had decided upon not appointing a committee of investigation, as I had urged them to do. When the advice of a consultant is not acted on I do not see what other course is open to him. 3. That my communications were not "most discourteous." 4. That I did not suggest that the "Southampton Medical Society should hold a committee of enquiry," but that one should be appointed which was "unbiased" and "independent." 5. That I have expressed no opinion as to the questions at issue between the Southampton Free Hospital for Women and the Southampton Medical Society.—I am, Sirs, yours faithfully,

W. S. PLAYFAIR.

George-street, Hanover-square, April 13th, 1895.

"COLOUR VISION AND ACCIDENTS."

To the Editors of THE LANCET.

SIRS,—The importance of perfect colour vision for mariners and railway servants is unquestioned in the minds of ophthalmic surgeons. It is not so, however, in the minds of railway directors and Board of Trade officials, nor, to some extent it would seem, in the minds of members of the medical profession. It is to these members of the profession that (by the kindness of the Editors of THE LANCET) I would appeal to weigh well the reasons that have induced their ophthalmic brethren to make it a burning question of the day, for unless the profession as a whole are convinced that no colour-blind men should be employed wherever red and green signals have to be interpreted, and where their wrong interpretation may mean loss of life and appalling disaster, it is certain that the lay officials who have the final voice in the matter will be unconvinced. In a recent number of THE LANCET[1] Dr. Gowers, in a letter on "Colour Vision and Accidents," asks a series of questions which should not pass unanswered, although I am not sure whether they are asked inquiringly or doubtingly. "For many years," he says, "keen attention has been paid to this question and examinations instituted. Has any accident during this time been brought home to defect in colour vision?" The reply to this question can be best given by quoting cases supplied by Mr. T. Bickerton.[2] Case 1, quoted from the *Shipping and Mercantile Gazette and Lloyd's List*, June 29th, 1881: "The pilot of the *City of Austin*, which was lost in the harbour of Fernandia, Florida, last April, is proved to be colour blind. In this way, it would appear, he mistook the buoys, and his mistake cost the owners 200,000 dollars (£40,000). An examination showed that at a distance of more than six feet he could not distinguish one colour from another. The physicians attribute the defect to an excessive use of tobacco." Case 2, quoted by the same authority, is recounted in a letter from Messrs. McIntyre and Co., Liverpool shipowners: "Our ship *Corbet Castle* collided in the South Channel, bound from Dundee to Cardiff in 1879, with the *T. H. Ramien*, due, as far as we can now make out, to the colour blindness or short-sightedness of the chief officer."

It is clear, then, that accidents have occurred in consequence of defects in colour vision. Dr. Gowers' next question is, "Has any railway servant, found by Holmgren's test to have defective colour vision, been confronted at night with red and white lights and failed at once to distinguish one from the other and to state correctly which was white and which was red?" I do not know whether I am wrong in supposing that what Dr. Gowers meant to contrast were red and green lights, the signals which are most often confused, and that white was printed by mistake, but this is of little consequence to the argument, as it seems clear that what he means is, Have colour-blind men been taken on to the permanent way and there failed to name correctly the colours of the signals? The reply is again "Yes." Professor Holmgren records the following case in point.[3] "A locomotive fireman at one end of a private railroad was examined by the railroad surgeon and declared to be completely colour blind. Nevertheless, he was allowed to continue at his work, and he started out as fireman on the next train. The surgeon at once telegraphed the 'director of traffic,' who was at an intermediate station. The director received the telegram a quarter of an hour before the train was to arrive on which was the fireman. He at once improvised a practical test in this way: he ordered a stationmaster a few miles further on to show the 'stop signal' (a red lantern), contrary to what was customary, on the side of the road the fireman had his place on the engine. He then got on the engine and told the engineer not to notice the false 'stop signal' but keep boldly on, no matter what happened. Thus prepared the train went on. The director warned the fireman to carefully watch the signals on his side, and so the train approached the 'stop signal.' When quite near the director called out, 'Why don't you slow up? Didn't you [to the fireman] see the stop signal?' 'No,' he quietly replied, 'all is clear'; the stationmaster has shown the usual white light.' This test was naturally striking and convincing. The consequence was, of course, self-evident. Arrived at the other end of the road the director had the fireman tested by another railroad surgeon. He naturally also reported the man to be colour blind, and the fireman was dismissed for ever from a locomotive."

The next question Dr. Gowers asks is a similar one applied to sailors: "Has," he asks, "any similar fact been established as to red and green lights in the case of sailors?" The circumstances may be considered on all fours with those of railway men, for the colours used are the same, the lanterns are much the same, and the illumination is usually identical. The colour blindness that would lead to an accident in a railway official would be capable of leading to an accident in a sailor. The reply to the question may be found in two more quotations, again from Mr. Bickerton.[4] The first is to be found in the annual report of the Supervising Inspector-General of Steamboats to the Secretary of the Treasury, dated Washington, 1880, and reads as follows: "On the night of July 5th, 1875, there was a collision near Norfolk, Virginia, between the steam tug *Lumberman* and the steamship *Isaac Bell*, the former vessel bound to, and the latter from, Norfolk. The accident occurred at about 9 P.M. on an ordinary clear night, under circumstances which until recently seemed more or less mysterious. The master of the steamer and all his officers made oath that at the time the signals were made to the tug the latter was from one to two points on the steamer's starboard bow, and consequently the steamer's green light only was visible to the approaching vessel. Yet the master of the tug, whose statement was unsupported by any other testimony, asserted that the steamer's red light was exhibited, and signaled accordingly. The discrepancy in the statements was so great that many persons uncharitably charged the master of the tug with being intoxicated, although no evidence was ever offered in support of the charge. By this accident ten persons lost their lives. Upon a visual examination of this officer under the rules during the past summer, and during which time there had been no question as to his sight, by the surgeon of the Marine Hospital at Norfolk, he was found to be colour blind, two examinations having been accorded him with an interval of ten days between them." In the second case, although no accident occurred, it sufficiently points the moral to be pertinent to the question:[5] "The steamer *Neera* was on a voyage from Liverpool to Alexandria. One night, shortly after passing Gibraltar at about 10 30 P.M., I went on the bridge, which was then in charge of the third officer, a man of about forty-five years of age, and who up to that time I had supposed to be a trustworthy officer and competent in every way. I walked up and down the bridge until about 11 P.M., when the third officer and I almost simultaneously saw a light about two points on the starboard bow. I at once saw it was a green light and knew that no action was called for. To my surprise the third officer called out to the man at the wheel, 'Port!' which he was about to do, when I countermanded the order and told him to steady his helm, which he did, and we passed the other steamer safely about half a mile apart. I at once asked the third officer why he had ported his helm to a green light on the starboard bow, but he insisted it was a red light which he had first seen. I tried him repeatedly after this, and although he sometimes gave a correct description of the colour of the light he was as often incorrect, and it was evidently all guesswork. On my return I applied to have him removed from the ship as he was in my opinion quite unfit to have charge of the deck at night, and this application was granted." But supposing we *knew* of no accidents occurring as the result of colour blindness, it would not prove that they never happen, and we should still be justified in insisting that our trains and our ships should not be officered by colour-blind officials. We may not know of any accidents having occurred through the man who comes round and taps the wheels of the railway carriages being deaf. Yet if we knew that a deaf man were doing the work we should hardly be satisfied if he told us that, although he could not hear the bell note, there was a vibratory thrill which communicated itself to him and told him all was right. We expect the axles to be periodically tested, and we expect that the work shall be done by men who are not handicapped by the loss of any faculty.

In an annotation in THE LANCET[6] the question is asked whether, because a man is colour blind, it necessarily follows

[1] THE LANCET, March 2nd, 1895.
[2] Colour Blindness and Defective Eyesight in Officers and Sailors of the Mercantile Marine, 1890, p. 16.
[3] Control of Defective Vision on Land and Sea. B. Joy Jeffries, 1883, p. 6.
[4] Op. cit., p. 16.
[5] Mercantile Marine Reports, vol. xiv., No. 162.
[6] THE LANCET, March 23rd, 1895.

that he cannot tell that there is a difference between a red and a green or be conscious which light is shown. Ordinarily a colour-blind engine-driver can distinguish the signals, not by the colours, but by the difference in the intensity. The obvious meaning of the writer is that as long as the signals can be differentiated it is unfair, or at least unnecessary, to impose more stringent tests. Now, as the colour-blind do not see the colours to which they are blind, it follows that the effect would be the same as changing the coloured signals now in use for white lights and conveying the messages "safety," "danger," and "caution" by turning the light up or down, increasing or diminishing the intensity that is, according to the required signal. Everyone would recognise at once the dangers incidental to signaling by such means; a "bright light," a "medium light," or a "dull light" would be judged not only according to the personal equation of the observer, but also according to the surrounding circumstances. And yet this is how the colour-blind see the colours. On a foggy night, on a snowy evening, or on a misty morning the colour-blind sailor or engine-driver must make due allowances before he can decide whether a light is red or green. His decision depends on a mental process which has to weigh many pros and cons before it can make a deduction. He must enter into an elaborate mental argument with himself whilst travelling at railway speed before he can decide how he shall interpret the signal. The effects of cloud or rain, of fog or smoke, the overshadowing of surrounding trees or buildings, must be duly weighed, even the condition of the lantern itself must be considered before he can decide whether the signal is bright, medium, or dull. All this cerebration must be instantaneous, and it would be a little late when he had ruined valuable rolling stock, to say nothing of its contents (which may be passengers), to find that he had made a slight error.

I am, Sirs, yours faithfully,

W. M. BEAUMONT,
Surgeon to the Bath Eye Infirmary.

Bath, March 30th, 1895.

"WHAT IS 'PREMATURE DISCHARGE' FROM A FEVER HOSPITAL?"

To the Editors of THE LANCET.

SIRS,—In your issue of the 6th inst. you published in the Parliamentary Intelligence the reply of the President of the Local Government Board to questions put to him by the members for Islington on the above subject. In this reply he has been made to state, on information supplied to him by the clerk to the Metropolitan Asylums Board, that there appeared to be no justification for attributing the illness of the father and children to any infection caused by the premature discharge of William Holland from hospital; and that in the case of the two children who had died there was "strict evidence that the disease was diphtheria and not scarlet fever." As I am to some extent responsible for the information on which the members of Parliament based their questions, allow me to say that I hold copies of the death certificates of these children, one of which states that the cause of death was (*a*) scarlet fever, twelve days, (*b*) diphtheria, nine days; and the other (*a*) scarlet fever, (*b*) nephritis. These children both died in hospital, and, of course, their deaths were certified by the hospital physician. This being so, I entirely fail to discover where the clerk to the Metropolitan Asylums Board obtained his "strict evidence" that the children did not die from scarlet fever, which in each case was the primary certified cause of death, and which was, in the opinion of their private medical attendant, undoubtedly contracted by the too early discharge from hospital of another member of the family suffering from this disease. After all, the question at issue is not, Did these children die from diphtheria? but, Did they suffer from scarlet fever presumably contracted by the premature discharge of William Holland from hospital? I hold that the evidence of the death certificates of the Metropolitan Asylums Board's medical officers is conclusive on this point, and that the children did suffer, as I have alleged, from scarlet fever in the first instance, and that it is impossible for the clerk, in the face of such certificates, to justify the statement for which he has made the President of the Local Government Board responsible.

In your last issue you ask the question, "What is the 'premature discharge' of a patient from hospital?" To this I reply, the return of a patient to his home in an infective condition, irrespectively of the length of time he may have been under treatment in hospital. I know that at times it is very difficult to state positively that a patient, particularly one who has suffered from scarlet fever, is free from infection. But I hold that in these days of bacteriology it ought to be possible to clear up a doubt as to the condition of a patient before his discharge. Dr. Priestley has recently demonstrated to his entire satisfaction that it is possible by means of treatment with eucalyptus oil so to disinfect patients that they may be discharged with perfect safety to their homes, and he has, in fact, sent a large number of cases of scarlet fever to their homes without having any "return" cases. If to proper and efficient washing and bathing, and cleansing of the mouth and fauces be added the removal of the patients to convalescent wards before final discharge from hospital, then I think there would be fewer return cases than at present. Why the Convalescent Hospital at Winchmore-hill is not more fully used than it is is a question I cannot pretend to answer. I hope it is not due to economic reasons, for surely it is the falsest economy to send patients from the acute wards of a hospital to their homes with the almost certainty of conveying with them—it may be in their mouth or throat, or even in their lungs—the poison of the wards which they had just left, for thereby new cases will be created, which of course must entail additional expense for treatment on the parents or on the ratepayers. This subject of the discharge of patients is of the utmost importance to the public, some of whom, I regret to say, have had their faith in hospital isolation much shaken by the recurrence of "return" cases, and I therefore trust that the Metropolitan Asylums Board will endeavour to devise means to prevent the recurrence of any ill results in future.

I am, Sirs, yours faithfully,

ALFRED E. HARRIS,
Medical Officer of Health.

Islington, April 17th, 1895.

To the Editors of THE LANCET.

SIRS,—I have read with much pleasure in THE LANCET of April 13th your interesting annotation, "What is 'Premature Discharge' from a Fever Hospital"? The question is asked, is there not such a thing as recurrent desquamation after an attack of scarlet fever, and may not a patient discharged with a clear skin subsequently in a fresh environment evince a partial redesquamation? I think few of those who have had an extensive experience of this disease have not seen such cases from time to time. It appears to me that the daily antiseptic warm bath so often neglected by the parents after the discharge of the child from the fever hospital would not only act as a preventive in the spread of the disease to others in cases of premature discharge, but also in those of recurrent desquamation.

I am, Sirs, yours faithfully,

C. S. LEE.

"THE LONDON AND MANCHESTER INDUSTRIAL ASSURANCE COMPANY, LIMITED."

To the Editors of THE LANCET.

SIRS,—Your correspondent who signs himself "C. C." must surely be playing a game at figures within himself if he thinks he approaches this momentous question (I use the word momentous advisedly) by gravely stating that £2 17*s.* on quarter day "is not to be despised." As a matter of fact, the question is one, although it *primâ facie* only appears to immediately refer to the above company, who are undoubtedly a most honourable company, and, I venture to state, deal as liberally with their medical officers as their narrow financial margin will permit. The question, however, practically at stake is a very broad one indeed, nor does it refer especially to this company, or any other company or "friendly society," but is simply this: Can nothing be done to put a stop to the abominable system of allowing medical services to be put up to auction by the touters of commercial concerns, and thus having onerous and responsible duties knocked down at an old song? I repeat, this is the broad question at stake. Clearly, medical men are not competent to protect their own private interests, to say nothing of the public, otherwise they would not nibble at the ground bait offered by the commercial world; and even the happy recipient of £2 17*s.* per quarter would do well to bear in mind that "all is not gold that glitters," and I can tell him, if he will pardon me, that such as he are worth their weight in gold to the commercial world. Now, Sirs, to come exactly to the point, and we need not clog our

heads with figures, as we simply have to stand face to face with one or two very patent facts to solve this question once for all, which, if I shall not shock your correspondents, I will state in broad Saxon-English, even at the sacrifice of all literary refinement. One of these is that as a profession we have to live; (2) somebody must keep us; (3) the aristocracy cannot do so, as their minority is so insignificant that they cannot even keep West-end consultants; (4) the upper middle-class cannot keep us, as they stand likewise in too small a minority, and even these nowadays are for the most part as poor as church mice. It follows, therefore, that the remuneration of our profession, be it little or nothing, must in the aggregate, so far as concerns general practitioners, proceed from the lower middle and working classes, and it is precisely upon the former of these classes more especially that commercial men are playing irreparable havoc. This is sufficiently proved in provincial towns, where private practice has suffered a deficit which it would be absurd to contend has met its equivalent in the remuneration to the medical officers of friendly societies, and although the managing director of the London and Manchester Industrial Assurance Company states without "hesitation" that their officers gain as much from their members as they would regarding those members as private patients, the system, I submit, is to all intents and purposes, so far as the interests of our profession are concerned, one and the same, and that is of touting the public and offering medical services up to auction as aforesaid. In conclusion, Sirs, be it observed if these classes are to have incessantly dinned into their ears by the itinerant touters of enterprising companies the doctrine that a spirit of thrift, economy, and independence can be maintained on their behalf by these societies on payment of mere nominal fees, we may calculate almost to a dead certainty that another decade or two will complete the insolvency of our profession—that is to say, if it is not already complete.

I am, Sirs, yours faithfully,

CLEMENT H. SEBS.

Queen's-road, Peckham, S.E., April 11th, 1895.

To the Editors of THE LANCET.

SIRS,—Your correspondent "C. C.," in THE LANCET of April 13th, writing in defence of the above company, compares it favourably with other clubs—Hearts of Oak, Oddfellows, Rechabites, &c.—and hints at irregular payment by these latter. I may say that these clubs where I live pay quite as much—some, I believe, more—than the London and Manchester. But the object of my writing to you is to draw attention to a point not yet alluded to in your correspondence, certainly not by "C. C.": that there is no comparison whatever between the work required of medical officers by any clubs which admit *women and children of all ages without medical examination*, and clubs, such as those referred to, which are for *men only*, who enter in the prime of life and have all to pass a medical examination. These latter are usually of the true working class (though there are exceptions even in these clubs, exceptions mostly due to rise in life after entrance), and require very much less attention in every way than a club of women and children. Men—working men—usually turn up at the surgery. Women and children in clubs, many of them not of the true working class, usually require to be visited. Children have their teething, convulsions, mumps, measles, scarlet fever, &c. to go through; women their uterine irregularities, climacteric troubles, and many other ailments peculiar to their sex. In short, Sirs, the visiting list of any general practitioner, as is well known to the profession, contains very few men in proportion to women and children.

I am, Sirs, yours faithfully,

April 15th, 1895. EQUITY.

To the Editors of THE LANCET.

SIRS,—I have been greatly interested in the correspondence that has lately appeared in your columns concerning this society, and you will doubtless consent to publish my contribution. I notice that a good many of the letters are written by medical men who do not belong to the society and are simply writing from hearsay. You will probably admit that reliable evidence from a medical referee of the society is required, and such I am in a position to supply. The expressions "sweating" and "degrading" are freely made use of, but I have not seen anything yet to support the charge of sweating by this society as being in any way different to the prices obtained for other contract work. The letter of Mr. A. M. Moore is certainly worth perusing, but I cannot understand what kind of a society he had got hold of, and am not surprised that he resigned. The payment of the London and Manchester Society is princely compared to it.

I give the figures for visits paid to members during 1894:

	Visits.	Quarterly payments at 1*s.* per member.
January	49	
February	49	£30 6*s.*
March	12	
April	14	
May	32	£29 5*s.*
June	9	
July	42	
August	26	£31 3*s.*
September	10	
October	93	
November	45	£29 3*s.*
December	54	
Total	435	£119 17*s.*

I have not included in the above two patients who had 40 or 50 visits, and who paid for the attendance at a somewhat reduced fee. The number of bottles of medicine I can only estimate, because I kept no record of them, but I put them down at 1200, which is about the same proportion as in Mr. Moore's list. Let us see how it works out as regards payment for actual work done: 435 visits at 2*s.* per visit come to £43 10*s.*, leaving £76 7*s.*, or 1527 shillings, for 1200 bottles of medicine. I do a lot of work amongst the poor, and I only wish I could get paid at this rate for all of it. I also give you the figures for the past quarter of this year:—

1895.	Visits.	Quarter salary.
January	117	
February	138	£31 14*s.*
March	96	
	351	

It must be remembered that the influenza epidemic was raging during these months and it struck down people wholesale in my district. Although this last quarter does not pay, I have no doubt that I shall make up for it in the summer. I may add that the above work was conscientiously done (and not by an assistant) and proper drugs supplied. If it were not so I should have no chance of keeping up the list to its present number. When influenza was about I was very busy, visiting in February between 50 and 70 patients daily. If other medical men would give their experience we could then form some idea if "sweating" exists. Abusing the society without arguing on facts will, I am afraid, not carry conviction to many minds.

Now, with regard to the abuses which undoubtedly do exist—viz., touting, people joining who are in a position to pay proper fees, &c. In my experience these cases form a very small percentage of the whole; they are not countenanced by the head office, and are due to the energetic indiscretion of the agents and collectors. The points to be considered are: Is "medical aid" a system which ought to be encouraged? Does it encourage thrift amongst the working classes? Do we medical men get more money (to put it bluntly) out of that class as a whole by this method than by charging ordinary fees? If these questions can be answered in the affirmative, and in these days when political economy and thrift among the working classes are so much talked about it will require a good deal of evidence to prove a negative, then I submit that the abuses complained of can and ought to be remedied. I have never done any parish work, but I know some friends who do, and from what I have seen of it I have come to the conclusion that I am better paid than the "parish doctor" in proportion to the work. There is another point, with your permission, I should like to say something about, and that is the fees paid by the poor people. I observe that the South-West London Medical Society has passed a resolution condemning the practice of charging fees as low as 1*s.* 6*d.* Of course, there is nothing to prevent the members of any society passing any resolution they choose, but if they think that medical men who carry on practice in a poor district ought not to charge low fees, such as 6*d.* and 1*s.*, I can only say they are absurdly mistaken. I fail to see how a working man with wife and family earning between 20*s.* and 25*s.* a week can afford to pay 1*s.* 6*d.* for medicine and 2*s.* 6*d.* for a visit. The fees must be regulated according to the means of the patient, and it is impossible to lay

down a hard-and-fast rule. It seems a pity that "A General Practitioner" sneers at medical men who charge low fees by using the expression "valuing his services" and "estimating his capabilities ..... at 1½*d.* per week." It is nonsense to say that we are "degrading the profession" by attending the poor at fees they can afford to pay. I thank God, Sirs, that I am able and willing to do it, for I take it to be impossible to degrade our profession by such noble work as healing the sick and helping the poor. I am afraid some of your correspondents think that the public exists purely for the benefit of the profession; I am inclined to think that the profession exists for the benefit of the public. Although I have spoken as above in favour (in accordance with my experience) of "medical aid," I do not consider myself bound to stick up for it through thick and thin, and am quite open to conviction, though at the same time mere abuse will not affect me.

For obvious reasons I do not desire my name to be published, but enclose my card.

I am, Sirs, yours faithfully,

London, S.W., April 15th, 1895. ONE INTERESTED.

To the Editors of THE LANCET.

SIRS,—In view of the attacks made on the above association in your columns, I ask permission to offer a few observations on the matter, having acted for more than two years as one of its medical officers.

I may premise my remarks by a concise rehearsal of the articles of my belief on the subject of clubs: I believe the less a medical man has to say to them the better, they being simply a development of trades unionism for the purpose of extorting unjust terms from a profession too incoherent and individually selfish to resist such. Unfortunately, however, one is confronted with the awkward fact that a considerable portion of the population consists of persons either too poor to pay even the lowest medical fees (especially when illness is protracted or work scarce) or too dishonest to pay anyone. Clubs are therefore a necessity—an unpleasant one no doubt, but a satisfactory alternative to bad debts. This being so, the question arises, "What is a reasonable club fee?"

As the London and Manchester Industrial Assurance Company has been pilloried in your columns, it being alleged to be a system of "sweating" medical men, I would challenge those who make these charges to adduce examples of "sick clubs" or benefit societies which pay a higher rate of remuneration than one shilling per quarter per member. This is, I believe, the fee fixed by the Foresters, Oddfellows, and other societies, the medical officers of whom, so far from being ashamed of their connexion with such, are in very many cases careful to note such appointments in the pages of the Medical Register and directories. Sick clubs in connexion with various churches and chapels offer even a smaller remuneration; nevertheless, I find that my medical neighbours are content to act as their medical staff without remonstrance.

Passing from the question of fees I shall now proceed to the charge of "touting." Is it to be understood from the grave charges which have been made that the *modus operandi* of the agents of the London and Manchester Industrial Assurance Company consists in going from door to door, libelling all medical men except their own medical officers, who approve of or connive at such unwarrantable action? I do not for one moment believe that such a charge can be substantiated. Isolated cases of improper solicitation by agents may, and I have no doubt do, occur, nevertheless I believe such to be the exception and not the rule. Further charges against this company are that it is controlled by laymen for their own aggrandisement, and combines life assurance with the providing of medical attendance. Are the Foresters and other benefit societies managed by members of our profession, and do they exist merely for the relief of the sick? No one in their senses would assert such. Before assuming that it is unprofessional for a medical man to accept office from a lay body, it must first be proved that such body either calls on him to perform duties unbecoming a professional man, remunerates him insufficiently, or treats him with a want of courtesy or respect due to the profession in general or himself personally. Another alleged grievance against this association is that when members join such a society they sever their connexion with their old and tried medical adviser. I presume this objection applies with equal force to a great many other medical clubs. Some time since a slate club was formed in my district by a pseudo-philanthropist. Under the mellowing influence of a "high tea" gratuitously supplied many members were enrolled. Their medical supervision was confided to a medical neighbour admittedly on the ground that he had several "shops" in various parts of the district, and numbers of my patients were thus involuntarily placed in the hands of this shopkeeping member of the profession. I have shown that the fees paid by the London and Manchester Industrial Assurance Company, if small, are equal or in excess of those paid by other societies offering medical assistance to the poor; while, so far from its medical officers being, as one of your correspondents alleges, "in bondage," I most emphatically assert, from my own experience, that they are free from any lay dictation and are treated with the utmost courtesy. So far from discouraging such an undertaking, I believe it to be deserving of support, as it does for us what we appear incapable of doing for ourselves—viz., evolving a scheme by which the really necessitous classes may obtain medical relief on reasonable terms.

I am, Sirs, yours faithfully,

April 11th, 1895. FAIRPLAY.

To the Editors of THE LANCET.

SIRS,—Let me quote from the *Devon Evening Express* a few words from a report of a recent inquest, which illustrates well the baneful results of "touting" under the "medical aid" system, as mentioned in Mr. A. M. Moore's letter which appeared in THE LANCET of the 13th inst. "The Coroner: Was the child insured?—A.: Yes, sir, from birth; I did so to keep the insurance man away.—Asked to explain the latter statement, witness said the insurance agent kept bothering him to insure the child's life, and he thought the easiest way out of it was to do so. (Laughter.)" There can be no doubt that the touting exists, and the evidence of it, though laughable to the public, has its most serious side for the medical profession.

I am, Sirs, yours faithfully,

Elstow, Exeter, April 8th, 1895. M.D.

ANÆSTHETICS.

To the Editors of THE LANCET.

SIRS,—Will you allow me to call attention to the fact that the possible dangers arising from imperfect admixture of chloroform and ether in the A.C.E. compound anæsthetic, so ably demonstrated by Dr. Truman, may be obviated by nebulising the mixture in Oppenheimer's globe inhaler or some similar apparatus; as also that by using nitrous-oxide gas as the atomising agent with ether alone (by preference) you get an ideal anæsthetic, scarcely any cyanosis, speedy insensibility, rapid recovery, and, so far as my experience goes, no sickness?—I am, Sirs, your obedient servant,

CHARLES BELL TAYLOR, M.D.,
Surgeon to the Nottingham and Midland Eye Infirmary.

April, 1895.

ANÆSTHESIA FOR LOWER ANIMALS.

To the Editors of THE LANCET.

SIRS,—Attention was recently drawn to the urgent need there is that all lovers of animals should set their faces against operations being performed upon horses and farm stock without recourse being had to the alleviating influence of anæsthetics. Just as surgery now practised upon the lords of creation has widened its boundaries within the past few decades to an enormous extent, so have operations upon their more lowly fellows—the beasts that perish—been multiplied and been rendered more complicated. In the older days the mere suggestion of chloroforming a horse or a sheep was received with a smile, but owing to the advent of wiser counsels the more enlightened among stock breeders have at the present day adopted chloroform as a routine companion to the red-hot iron or the knife. Mr. John Moore, M.R.C.V.S., of Manchester not long ago communicated a valuable article upon the subject. In it he stigmatises operations done without chloroform as "veritable and revolting acts of cruelty and butchery," and indicates that many veterinary procedures are rendered failures because chloroform is not used. Mr. Fleming, himself a strong believer in the routine employment of chloroform for all save the most trifling of operations, assigns as the causes which prejudice men against its use the supposed difficulty of obtaining and maintaining anæsthesia and the attendant expense. Possibly such reasons

had weight in former days; at present they have none. Methylated chloroform is by no means an expensive luxury, and the admirable apparatus which Krohne and Sesemann make for veterinary use in the stock farm at once renders chloroformisation simple and entails quite a trivial expenditure, as the quantity of the drug required is very small. This apparatus is in principal a large Junker's inhaler, with face-pieces specially designed to meet the requirements of the stock farmer. Nor, as a matter of fact, is even this apparatus necessary; an apparatus constructed from a nosebag answers perfectly well. Horses perhaps require more chloroform than other animals, and the cost in their case is estimated by Mr. Moore at 2*d.* per head; cattle cost far less. The troublesome stage of excitement which to the inexperienced proves a bugbear can, as Fleming and others have pointed out, be lessened or abrogated by the use of a less diluted vapour during the early stages of the anæsthesia. If "crowded on" at first, little difficulty ensues in the later stages. The danger from overdosage in horses and cattle seems, if the most experienced of our veterinary surgeons are to be trusted, quite minimal. Indeed, it is said you cannot kill a horse by chloroform inhalation. For sheep, which are subjected to most painful mutilations, chloroform can be easily employed. How any humane person can deny these patient dumb things so slight a mitigation to their teleological existence it is difficult to say, unless we admit, with the poet, that "only man is vile." The operation is bettter performed and fewer hands have to be employed when chloroform is used. For castration of calves also and the "ringing" both of bulls and swine chloroform has been widely used, and has rendered the procedure at once more easy and more scientific. Firing of horses is now, notably in the case of favourite hunters, commonly performed under the anæsthetic, and certainly no man can be called merciful who is not "merciful to his beast" in the matter of chloroform. A further point, and one of no slight importance, is the much better results which follow operations undertaken upon animals which have been chloroformed. In a report before me I find that lambs so treated compared most favourably with those subjected to the barbarous handling in vogue in less enlightened farms, while the same may be said with regard to horses and cattle. The rough-and-tumble butchery of the pre-chloroform era of veterinary surgery has little to commend it when compared with the precise methods and accurate results obtained by scientific exponents of veterinary surgery such as can be arrived at by the aid of chloroform. If owners of horses and farm stock and of pets once realised that chloroform for their animals meant not only immunity from pain, but also ensured better results and less risk of failure or accident, there is no doubt that they would insist upon the use of the anæsthetic, and would see that it was given efficiently and in the best way.

I am, Sirs, yours faithfully,

April 10th, 1895. ANÆSTHETIST.

FATAL HUMAN GLANDERS FROM A NON-FATAL CASE IN THE HORSE.

To the Editors of THE LANCET.

SIRS,—Mr. Garstang's interesting paper on Glanders[1] is a valuable addition to our knowledge of the causation and treatment of that disease. In it he proves that a non-fatal case of discharge from the nostrils of a horse is capable of producing glanders in the human subject, a fact which, though not unknown, is too often lost sight of by medical practitioners as well as by the public. For that reason the following fatal case may be of interest. On May 26th, 1894, I saw a man in consultation with his usual attendant. He then showed the well-known signs of chronic glanders, and on making inquiries I found that a short time before his attack he had been in charge of a horse that suffered from symptoms of general disease with nasal discharge, from which, however, the animal recovered. The point of infection in our patient was on the upper lip, and the submaxillary and cervical glands became quickly affected, those of other parts of the body being subsequently implicated. The patient was afterwards removed to Cork, where he died with symptoms of pyæmia. Dr. T. G. Atkins of that city saw him before his death, and independently made a similar diagnosis of chronic glanders. A medical man who examined the patient also acknowledged that the attack was one of glanders, but did not think that it could have been contracted in the way I have mentioned, as in his opinion the disease is always fatal in the horse. Mr. Garstang's paper has effectually answered the latter objection, and I briefly allude to the above case as it supports the view so clearly propounded in the article referred to and proves the need for greater care in the handling of horses suffering from any discharge from the nostrils.—I am, Sirs, yours faithfully,

Bandon, April 11th, 1895. J. J. WELPLY.

[1] THE LANCET, March 16th, 1895.

THE PREVENTION OF SMALL-POX.

To the Editors of THE LANCET.

SIRS,—Seeing so much in THE LANCET lately as to the etiology and prevention of small-pox, I think a short account of the ideas entertained by the Dyaks of Borneo on the subject, and of the mode of application of them byone of their number, might prove amusing, if not instructive, to some of your readers. In the year 1889, while acting as principal medical officer to the Sarawak Government a case of small-pox occurred among the Sarawak Rangers, a corps composed of Sea Dyaks. The case was isolated, and the whole corps (as I thought) was vaccinated. Three or four, I forget which, other cases occurred, only one of which was confluent, and which proved fatal. I afterwards got the following history of this case from the sergeant-major. The Dyaks believe that a devil presides over each epidemic disease, but are not so smart but that a clever Dyak might trick them. While I was vaccinating he slipped over from the unvaccinated to the vaccinated group without being noticed, and told his companions that in such a crowd the "small-pox devil" would never notice it, but think that he had been vaccinated with the rest. The Dyaks said that the "devil" was sharper than the man; I attributed it to non-vaccination, but the Anti-Vaccination League would probably say it was a mere coincidence.—I am, Sirs, yours truly,

J. WIDMER ROLPH,
Medical Officer, Pahang Corporation, Limited.

Kuantan, Pahang, March 6th, 1895.

"THE TITLE OF 'DOCTOR.'"

To the Editors of THE LANCET.

SIRS,—Dr. Campbell Black infers from my letter more than he has any right to do, and evades my contention. I stated that so far as I had been able to ascertain the title of "Dr." as applied to medical men was a "courtesy" one, on a par with that of "Rev." amongst divines, and that no *legal* question was involved. I also pointed out that Dr. Black would do better to spend a little money in satisfying himself as to the legal question if still in doubt about it. I am so satisfied on the point that I do not care to do it. I very seldom use the title of "Dr." myself, and have a door-plate inscribed "Physician and Surgeon." If, however, this quibble about a courtesy title is carried much further I shall be inclined to ask whether the M.D. confers the title of Physician without the sanction of one of the Royal Colleges. I believe it used not to do so. The whole squabble appears to me puerile and unworthy. Why cannot Dr. Black and others unite with us in our battle against real abuses, such as that of "medical charities," that of "medical aids," and the general tendency to depreciate and undervalue medical services? Surely this would be better than tilting against windmills, and if Dr. Black will do this I care not whether he calls me "Dr." or "Mr."; but he should not assume a knowledge of the amount of brass in my door-plate from a general statement of opinion on an open subject.

I am, Sirs, your obedient servant.

Loughborough, April 11th, 1895. J. B. PIKE.

P.S.—I may say that in communications from the Royal College of Physicians of Edinburgh I have repeatedly been addressed as "Dr.," and, knowing the position the College takes on the subject, have written to complain of the indignity, which, however, shows the common custom of using the courtesy title.

"A MODERN IMMORTAL."

To the Editors of THE LANCET.

SIRS,—In an annotation headed "A Modern Immortal," which appeared in THE LANCET of Feb. 9th, 1895, the credit

of the discovery of anæsthesia is given to Morton of Massachusetts—"Morton, to whom belonged the immortal honour of having been the first to demonstrate that prolonged anæsthesia could be safely produced by means of ether." It is simply for the sake of justice and truth that I write to declare that there is strong evidence to show that Dr. Crawford W. Long, practising in the town of Jefferson, in the State of Georgia, deserves the credit of having been the discoverer of prolonged anæsthesia by means of ether. His first operation under ether narcosis was done in March, 1842—four years before the time of the supposed discovery by Morton. The facts of the case are well brought out by Dr. Luther B. Grandy,[1] of Atlanta, Va., in an article in the *Virginia Medical Monthly*, October, 1893, by means of which he was forced into a contest with Dr. W. R. Hayden (of viburnum compound fame), who bitterly urged the counterclaim of Morton. As an evidence of the great amount of doubt in regard to Morton's claims of priority there is a white marble monument in Boston (where Morton publicly made known his supposed discovery) which bears the simple inscription: "To the Discoverer of Anæsthesia." Does that show that it is acknowledged, even by the people who saw what was done, that Morton was the discoverer? On the contrary, there stands in Paris a marble statue of Crawford W. Long, an enduring witness to the truth; and the Georgia Legislature will place his statue in the National Gallery of Statues in Washington as a fitting recognition of the immortal greatness of her son. Marion Sims published a piece on the subject in the *Virginia Medical Monthly*, May, 1877, in which it is demonstrated beyond practical doubt that Long is the true "modern immortal." It is in the interest of all science that the truth be known, and that not the slightest deviation from it be allowed; and I hope that in this case the truth will surely prevail. *Fiat justitia, ruat cælum.*

I am, Sirs, yours very sincerely,

Lynchburg, Va., March 13th, 1895. S. P. PRESTON, M.D.

"PROVISION FOR YOUNG IMBECILES."

To the Editors of THE LANCET.

SIRS,—As a guardian of the poor in a country union I ask to be allowed to say a few words in confirmation of the needs of which Dr. Shuttleworth has written. On coming to a country union from the metropolitan district I was astonished to find that no provision was made for idiots or imbeciles beyond the county lunatic asylums for adults. I found idiot children running about in the sick wards of the workhouse without any special care or attempt at training, while in a London union they would at once have been sent off to Darenth. This difference in the mode of treatment between London and the country I am utterly unable to understand; the children can only become worse till they are hopeless and have to be sent to the asylum for adult lunatics. Inquiries at all the county asylums for idiots showed that two or three were willing to take pauper children who were thought to be capable of improvement, and after much trouble I succeeded in getting two sent to the asylum at Star-cross, a journey of great expense, and with accommodation entirely inadequate to the needs of all the southern counties. As the subject has been discussed by Poor-law authorities during many years it is almost incredible that no action has yet been taken; we can only go on stating facts till the county councils are impressed with the need of establishing asylums sufficient for the needs, not only of pauper children, but of others also who by timely training might be saved from becoming life-long burdens on the rates. But in asking for educational asylums I would not limit the demand to the most hopeful of the children in workhouses. I would like to see all idiots and imbeciles removed, for the nurses in those institutions are far too few to be able to take proper care of them, and are already in almost all instances overworked. Let the worst as well as the best among them be removed and classified in an asylum, where each and all could have the best care and not be placed, as I have seen them, in wards with lunatics and adults. I would only add that the opening of many more schools or homes for the feeble-minded, who can hardly be classed with either idiots or imbeciles, is urgently called for, the two or three already existing being utterly inadequate for the number of such to be found in every workhouse and pauper school, and who are unable to benefit by the instruction given there. I may add that I am convinced the numbers far exceed those given in the recent report of the Local Government Board.

I am, Sirs, yours faithfully,

April 11th, 1895. LOUISA TWINING.

[1] Virginia Medical Monthly, October, 1893, February, 1894, March, 1894, and June, 1894.

"THE RESULTS UPON THE TESTICLE OF LIGATURE OR DIVISION OF THE VAS DEFERENS."

To the Editors of THE LANCET.

SIRS,—At the conclusion of his interesting lecture on the above subject, published in THE LANCET of April 13th, Dr. Joseph Griffiths deals briefly with the matter as affecting man, and sums up as follows: "It would hence seem that mere division, ligature, or occlusion of the vas deferens does not lead to atrophy of the seminal tubules; but if in case of division *there is, in addition, some damage to the other structures of the cord*, destructive changes, followed by atrophy and ultimate disappearance of the seminal cells, are liable to occur." As having a practical bearing upon this question, may I be allowed to call attention to a short communication which I published in THE LANCET of March 7th, 1891, upon "The Effect of the Division of Certain Constituents of the Spermatic Cord" &c.? In that communication I recorded three cases in which to my knowledge not only the vas deferens but also the spermatic veins and artery, with the other structures which go to complete the formation of what is commonly designated the spermatic cord, had been completely divided without any apparent damaging effect upon the nutrition of the testicle, a condition of things of which, so far as I am aware, no previous mention had been made in surgical literature. From these cases and from some other evidence which had come under my notice I drew the following deduction: "that division of the vas deferens, spermatic veins, and spermatic artery [i.e., practically the whole spermatic cord] is not necessarily followed by sloughing or even by subsequent wasting of the testicle *provided that a perfectly aseptic condition of the wound is maintained.*" At the date of my communication the time which had elapsed since the division of the structures indicated was not, perhaps, sufficient to permit of a reliable prognosis as to the final condition of the testicle in these cases. I have, however, quite recently had an opportunity for examining one of the patients concerned, and found the testicle (more than four years after the division of the cord) of normal size and consistence, and with its peculiar sensation indistinguishable in character and intensity from that of the opposite organ. The fact that I am unaware of any similar instance having been recorded is my main excuse for troubling you with this letter.

I am, Sirs, yours faithfully,

WILLIAM H. BENNETT.

Chesterfield-street, Mayfair, W., April 15th, 1895.

"PULEX IRRITANS."

To the Editors of THE LANCET.

SIRS,—In your annotation in THE LANCET of April 6th regarding the means of destroying this irritating pest one plan not mentioned upon one occasion gave exceptionally good results. The matting of my bungalow in Java suddenly became infected with myriads of fleas, so numerous that the legs, covered only with loose white trousers, were instantly coated with a living mass. Strong quassia tea was freely used as a wash to the mat-covered floors, and the swarms vanished as by magic.—I am, Sirs, yours truly,

April, 1895. RICHARD NEALE, M.D. Lond.

"ILLEGAL VACCINATION."

To the Editors of THE LANCET.

SIRS,—In the annotation under the above heading in THE LANCET of April 13th you deplore the increase of irregular and inefficient vaccination. That such an increase is a stern reality and fraught with most pernicious consequences must be the experience of every general practitioner, however limited his experience may be. After pointing out the extreme laxity with which the term "successful" is used in its application to vaccination you further add: "The small-pox statistics of the past decade would have presented a different aspect than they

do had vaccination been carried out by all practitioners with the efficiency demanded by the Local Government Board," and you express a desire for some definite pronouncement on this subject in the forthcoming report of the Royal Commission. Now, if this august body should advocate the abolition of vaccination as a compulsory measure this decision would be held by many to be distinctly condemnatory of the Jennerian theory. But would the enforcement of such a recommendation be of any material detriment to the cause of vaccination? Probably not. In fact, probabilities point in the opposite direction. If vaccination was purely voluntary, the consequences would be that those who submitted to it would do so from a firm belief and conviction in its efficacy as a protective, and with a view to procure the desired result would use their best endeavours to have it performed thoroughly and efficiently, and not in the perfunctory manner in which it is now so often done simply to meet a Parliamentary requirement. Under present circumstances, from the inefficient way in which the operation is often carried out, it is well nigh impossible for the general public to form any just estimate or in any way appreciate the true protective value of vaccination against small-pox, for there are hosts of individuals going about their daily avocations sincerely believing that they are almost absolutely proof against their dreaded foe, and each one of these individuals who is struck down by small-pox is regarded by the general public as a further proof of the uselessness of vaccination because he has been vaccinated and is yet afflicted, whereas in very many cases the operation performed on him was about as efficacious as in ancient days was the assumption of an amulet with mystic rites. It is obvious, then, that the larger the majority of the efficient cases out of the total of those operated on the less must be the difficulty of the public in recognising the true value of vaccination as a protection from small-pox, for they will be unable to point to vaccinated patients among the sufferers. Hence in years to come the more efficient performance of vaccination—and the more efficient because it is voluntary—must lead to a greater prominence of its real merit, and the general public will learn from living object-lessons to believe in a theory which a beneficent Government has failed to establish by legislation.

I am, Sirs, yours faithfully,

Worthing, April 13th, 1895. W. T. WYATT.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Manchester Chamber of Commerce on Lead Poisoning.

ON Jan. 5th attention was directed to a case of lead poisoning at Newton Heath, where evidence was given at the inquest as to the conditions under which work was carried on. At the meeting of the Chamber of Commerce on the 10th inst. the question of dyeing with chromic lead colours was brought up. The Chemical Sectional Committee laid certain resolutions before the Board, illustrated by a number of sample hanks of yarn which had been dyed by the chairman of the committee—some with chrome lead colours, the rest with other colouring materials—for purposes of comparison. The Board substantially adopted the resolutions of the Sectional Committee as follows: 1. "That the dyeing of goods with chrome lead colours, and especially the handling of goods dyed with these colours, is injurious to the people employed, unless special provisions are made and due precautions taken, and unless the workpeople heartily coöperate in making use of the appliances provided for their protection." 2. "That in view of the fact that the wearing of goods next to the skin coloured wholly or partially with chrome lead dyes under certain conditions may be injurious to health, it is desirable to substitute these dyes by others derived from innocuous colouring matters of similar colouring properties." 3. "That it would be an injustice to the dyeing trade to place any restrictions upon the colouring of goods by chrome lead colours unless such restrictions are also extended at the same time and to the same degree to the importation to this country and its colonies of such coloured goods, also to the dyeing trade of India, in which country very considerable quantities of goods are so dyed, one dyeworks alone being stated to turn out 20,000 lb. of yarn per day dyed with chrome lead colours." 4. "That the attention of merchants and their clients be called to the injurious effect of chrome lead colouring materials, and to the existence of others less injurious to health, producing similar colour effects, of which there are several." Commenting on this discovery of a fresh Indian trouble the *Manchester Courier* says: "The dyeing of cotton goods with chrome lead colours appears to be fraught with a double share of the evils of lead poisoning." It not only injures the health of the workpeople employed, but "it is capable of slowly poisoning people who wear cloth thus dyed next their skin." These facts have evidently impressed the mind of the Chamber, and "the directors warn merchants and their clients of the baneful influences which lurk in tissues displaying the gaudy colours derived from chrome lead," and call their attention to the existence of other less injurious colouring matters which might be substituted. As the *Manchester Courier* says: "Lancashire manufacturers might be depended on to make the change if the matters rested with them alone." But the compliment is a somewhat doubtful one, for it is equivalent to saying that they would do right if there were no temptation to do wrong. Unluckily, India is a formidable competitor, *ergo* the third resolution, that it would be an injustice to restrict the use of these chrome-lead dyes unless it was done all round; and the paper asks: "What would it profit this country for its merchants to sacrifice the profits of chrome-lead dyeing if Indian and other competitors only took advantage of their conscientiousness to make a greater use of the poisonous colours than ever?" It does not believe the Anglo-Indian Government will "surrender all at once to this challenge of the Manchester Chamber of Commerce on the subject of this free trade in lead-poisoning," so the poor manufacturers, it is to be feared, must let their conscientiousness go. When commercial interests are in conflict with ethics and morals the latter run much risk of defeat; but it is a sorry doctrine that because you poison your neighbour I will do likewise.

A Publican's Responsibilities.

In my last communication a conversation was mentioned that took place at an inquest between Mr. Smelt, the deputy coroner, and a juryman as to supplying drink to a drunken man, in which some strong remarks were made by the former on the responsibility of the publican if the man came to his death as a result. Since then the publican has had to appear at the City Police-court, charged with selling beer to a man already drunk and with permitting drunkenness. According to the evidence the man Flanagan and his wife had some drink together in a beerhouse. The wife then went home, but he adjourned to the defendant's, where he had a further quantity of drink, and by eleven o'clock was very drunk. In spite of this the publican's wife served him with some porter in a bottle, and suggested to another customer, who was also drunk, that he should see Flanagan home. It was stated at the inquest that as the men were going up the steps at the Jersey-street workmen's dwellings Flanagan fell back and received injuries to the head from which he died. At the court the widow said he had suffered from heart disease, and had been upset by the recent death of his father. It was said also that he was a good deal excited at the last public-house he visited, and in the court the story of the fall was somewhat modified, as his guide said he sank down or collapsed instead of falling backwards, as stated at the inquest; but at any rate he fell down the steps and fatally injured his head. The defendant's solicitor contended that heart disease and not drink was the cause of the fall, and that it was the existence of the former that led the landlady to send a man home with him. How she ascertained the condition of his heart is not stated. The publican said he was sober, but nothing seems so difficult for a publican as to make out the diagnosis of drunkenness. The summons was dismissed, the presiding magistrate saying there was a doubt in the case, and they had decided to give the benefit of it to the defendant.

Paupers' Tea.

In February last the *City News* published a new and improved dietary table which had been prepared for the Salford Workhouse. The weekly cost of food for old men was to be raised from 1*s.* 6½*d.* to 1*s.* 11½*d.*, that of old women from 1*s.* 4½*d.* to 1*s.* 9½*d.*, and of children up to sixteen years of age from 1*s.* 9½*d* to 2*s.* 3½*d.* This amounts to an increase of about 20 per cent. on the old expenditure, but, as the editor says, "no one would charge the guardians with extravagance even under the increased scale." In the issue of the 6th inst. it is stated that the improved dietary

does not appear to have come into operation yet, but the guardians are preparing for it "by effecting economies in other directions." It states that one of the new guardians drew attention to the quality of the tea still supplied to inmates, by whom it is said to be irreverently called "munko." It is made in the proportion of one ounce to eleven pints of water. The new guardian, whose taste cannot as yet have been educated up to workhouse tea, says "the compound is unfit to drink," and complains that the guardians have contracted with a retail dealer for tea at twopence a pound less than last year—i.e., at a shilling a pound instead of one and twopence. It seems that the strength of the tea was overstated in February, for instead of eight pints to an ounce nearly eleven pints of water are used. "Three-farthings worth of tea to eleven pints of water!" We are often told of the injurious effects of strong tea, from which, however, the Salford guardians do their best to save their "inmates," being due to the tannin and bitter extractive dissolved out by prolonged infusion. This is apparently disbelieved by the authorities at Withington, one of our largest local workhouses, and one supposed to be under the most scientific and philanthropic management. Here the tea is put into a canvas bag, dropped into the copper or cauldron, and infused—for three minutes or for five so as to get as little tannin as possible? By no means. They want to get all, tannin, extractive, and anything else that will come out, so it is infused for forty minutes! But although at this workhouse an ounce and half are used where Salford uses an ounce, the tea is said to be "very bad"—so bad, indeed, that the old women do not take milk with it, as it would destroy all flavour that might remind them of tea. The ratepayers should be remembered, and no extravagances indulged in by sentimental guardians; but with regard to tea a pitiful economy seems to be used.

The Corporation and Infectious Disease.

Hitherto the treatment of infectious disease in Manchester has been carried on by the Royal Infirmary under an arrangement with the corporation. For many years this plan has worked well, and the infirmary has done much to earn the gratitude of the citizens by the disinterested labour it has gone through in relieving the city of a great responsibility. The recent threatened invasion of cholera, and the serious epidemic of small-pox through which we have passed, made it necessary for the city to provide increased hospital accommodation for infectious disease on a large scale, in addition to that afforded by the infirmary at the Monsall Fever Hospital. These and other circumstances have gradually led to the opinion that it will be best for the city to acquire the hospital from the infirmary, and take charge itself of the treatment of infectious disease. The small-pox epidemic was a costly visitation, for it led to the expenditure by the corporation of £16,706 for new pavilions at Monsall, of £2204 for a temporary hospital at Withington, and of £4668 for a supplementary convalescent home at Clayton. The question of the transfer, though in a nebulous condition at present, is sure to come prominently forward before long, and so also is the necessity for a small-pox hospital at a sufficient distance from population. There has long been a bitter cry from Newton Heath against the treatment of small-pox at Monsall.

April 16th

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

St. Andrews Ambulance Association.

ON April 13th Dr. Alexander Thom's class, which has been conducted under the auspices of the St. Andrews Ambulance Association, along with his ordinary yearly volunteer class, was examined by Dr. Simpson, medical officer of health for Perth. Fifteen candidates presented themselves, six of them being for second examination with a view to obtaining the medallion. All the candidates passed, and the examiner expressed himself as being highly satisfied with the general knowledge displayed and with the acquaintance shown in practical bandaging and stretcher drill. As six of the candidates were constables of police the public may be satisfied that in this part of Scotland at least mistakes are not likely to be made between cases of illness and drunkenness which arrive at the police cells.

Unwholesome Food.

During March 4049 lb. of beef, 43 lb. of mutton, 140 lb. of "offal," and 757 lb. of fish were seized by the Aberdeen sanitary inspector and destroyed by magistrates' order or with owners' consent as unfit for human food. During the quarter January—March the city analyst, besides examining five genuine samples of butter, one of milk, and four of oatmeal, found two specimens of butter containing 60 per cent. foreign fat, one sample of water "unfit for drinking or cooking," one specimen of milk with "metallic impurity of non-injurious character," one of oatmeal containing 7 per cent. foreign granules, and another containing 3 per cent. foreign granules.

Proposed Memorial of a Donor of Medical Bursaries.

The late Mr. George Thompson of Pitmedden presented to the University of Aberdeen the sum of £6000 in 1882 to found medical bursaries, and a further sum of £3000 in 1886 to institute a travelling fellowship in medicine. Emeritus Professor Struthers writes from Edinburgh to an Aberdeen newspaper suggesting that a marble bust of Mr. Thompson, or a replica of his portrait in Aberdeen town hall, should be obtained for the hall of the University. In the course of his long career Mr. Thompson was Lord Provost of Aberdeen for three years, and represented that city in Parliament for five years.

The First Instance of Cremation in Scotland.

The remains of Mrs. Elizabeth Haining Laurie were cremated at the Western Necropolis, Maryhill, on Saturday afternoon last, at her special request. This is reported to be the first case of disposal of the dead by burning in Scotland.

A Medical Volunteer Camp.

The 1st Aberdeen Medical Staff Corps, under Surgeon-Captain Macgregor, will go into camp at Birkhall, Ballater, on Thursday, May 30th, and will remain under canvas till the following Monday.

Of 48 candidates 27 have passed the medical preliminary examination at the University of Aberdeen.

April 16th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Poor-law Guardians in Ireland.

THE *Dublin Journal of Medical Science* of this month contains an interesting paper by Dr. Dickson on Women as Poor-law Guardians. It would appear from it that the number of female guardians in England has very greatly increased since a woman was, for the first time, elected at Kensington in 1875. In 1887 there were fifty women guardians, while there are now in England no less than 800. In Ireland we are differently circumstanced, for the Act of Parliament of 1838 relating to the Poor-law administration here contains the distinctive expression "male person." No such phrase is to be found in the English Poor-law Amendment Act of 1834 and accordingly no legal objection to the election of women has ever existed in England. It is interesting to note that women seem to have failed to discover their eligibility in this regard for more than forty years.

Mercer's Hospital, Dublin.

I regret to note the death of Mr. McGuckin, who was long and honourably known as the registrar of this hospital. He was well known to many of the medical profession in Ireland and, indeed, also to the general public, as the father of the eminent tenor, Mr. Barton McGuckin.

Small-pox in Enniscorthy.

An outbreak of small pox has recently occurred in the town of Enniscorthy, the disease having been transferred in all probability from Dublin, for the man in whom it first showed itself had paid a visit to the metropolis exactly twelve days before. Although he remained there but a few hours, during which he drove across the town to return with his wife, a surgical convalescent from a hospital to which small-pox is not admitted, he seems to have caught the disease and carried it home with him. Since that date—i.e., during the last five weeks—twenty-four cases have occurred, of which one proved fatal. It is interesting to note that the patient, a child eleven months old who died, was one of five unvaccinated children, all of whom were attacked with the disease in its confluent form, in marked contrast to the mild variety which affected the patients who had been vaccinated. The local authorities have made every effort to cope with the disease by revaccination, isolation, &c. The arrangement for the latter proved,

however, quite insufficient, so that it has now become necessary to build special sheds in the neighbourhood of the fever hospital for that purpose.

The Royal College of Surgeons in Ireland.

The council of the Royal College of Surgeons has accepted the gift of a portrait of Mr. Henry Gray Croly, senior surgeon to the City of Dublin Hospital and formerly President of the College. The portrait, which is at present being exhibited at the Royal Hibernian Academy, was presented by the influential committee who organised this testimonial to Mr. Croly.

Intermediate Examination in Natural Science.

A medical man writes a sensible letter to the local daily journals in which he suggests that elementary biology should be included amongst the subjects for examination by the Intermediate Commissioners in 1896. Elementary botany has hitherto been required, but from girls only, while zoology has been altogether omitted. Many of the universities and licensing bodies specify biology as a compulsory subject. It would certainly smooth the path of the medical student who had adopted the programme of the Intermediate Commissioners if elementary biology had been one of the subjects in their curriculum.

The Calamity at Mountstewart.

Not alone in the north but in every part of Ireland regret has been felt at the calamity in Strangford Lough, by which eight lives have been lost. These, with the exception of two boatmen, were all trusted servants of Lord and Lady Londonderry at Mountstewart House, and persons of experience and character, whose loss will doubtless be much felt. The empty boat has been found, but up to this, the 16th inst., none of its occupants or anything to account for the disaster.

The Battle of the Clubs at Cork.

One grievance the Cork club medical officers complained of was that for a miserable pittance they are obliged to attend not only the club member, but also his family, the latter often including grown-up sons earning quite as much as their father. Not alone that, but the clubs generally regarded all persons dependent on the member as part of his family, and the practitioner was often called on to prescribe for uncles, aunts, and even mothers-in-law. However, I am glad to find that one of the imported medical men is not in sympathy with such a liberal widening of the family circle, and he has adopted what I am sure will prove a very effective method of defining what shall be the smallest amount of work he need do for his equally small remuneration. On being recently called to visit a club member's brother he went without demur, but on the completion of the attendance he very much surprised the member by furnishing him with a bill for medical services rendered. The member was so much unaccustomed to that sort of thing that he actually lodged a complaint against the medical officer at the next meeting of the club. He received abundance of sympathy from his brother members, but some of the more prudent told him that under present circumstances they could not think of fighting with their medical officer. Possibly the hint will not be lost on the other imported medical men, and the clubs may learn before long that certain disadvantages are likely to accrue from the attempt to procure medical services at ridiculously low prices.

The Cork Ophthalmic Hospital.

I have already mentioned that considerable friction exists with regard to the selection of a site for the new buildings. Engineers have given opinions for and against the position which had been all but decided on. The general committee were naturally perplexed, but their difficulties were still further increased by finding that the ladies' committee were waging a newspaper war amongst themselves. Lady Arnott, whose name was prominently identified with the recent successful bazaar, opposed the adoption of the proposed site, and referred to the large sum of money she had been instrumental in collecting. Other members of the ladies' committee promptly replied that Lady Arnott had done good service as treasurer, but that the heat and burden of the day had fallen to the lot of some seventy or eighty lady collectors. The net result of the controversy has been that other sites are under consideration. Lady Arnott has resigned, and the general committee have requested her to withdraw her resignation.

The Conjoint Board of the Irish College of Surgeons and Apothecaries' Hall, Dublin.

Dr. Edward Townsend, Professor of Practice of Medicine at the Cork Queen's College, has been appointed Examiner to the joint board of the Irish College of Surgeons and the Apothecaries' Hall, Dublin. Comparatively few of the Cork students become candidates for that qualification, but those of them who may present themselves for the examination will, I am sure, be glad to find a professor from their own college amongst the examiners.

The County Kerry Infirmary.

Dr. W. B. Hayes of Tralee has been unanimously appointed surgeon to the County Kerry Infirmary. Dr. Hayes studied in Cork and Dublin, and obtained his degrees at the Royal University of Ireland. He afterwards went to San Francisco, where he enjoyed a lucrative practice, but was obliged to return home owing to the ill-health of his father, Dr. J. Hayes, a highly esteemed practitioner in Tralee and coroner for the district. Dr. Hayes' appointment to the Infirmary is certain to give general satisfaction in the neighbourhood.

The Hospital for Children, Temple-street, Dublin.

Dr. M. C. Staunton and Mr. J. Lentaigne have been appointed surgeons to this hospital.

April 16th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Anti-streptococcic Serum.

ON the 23rd ult. M. Marmorek introduced to the notice of the Société de Biologie the important discovery of a serum which appears to be endowed with curative and prophylactic properties *vis-à vis* of the diseases caused by the streptococcus. It was found that when that micro-organism was passed many times through the system of the rabbit its virulence was greatly augmented, a culture introduced subcutaneously killing a rabbit in thirty hours with a dose of 0·000,000,000,01 c.c. This exceptionally active microbe retains its virulence in cultures and generates a toxine of vastly greater power than had been prepared up to that date. Previously immunised animals inoculated with this powerful microbe and those which receive a strong dose of the toxine it generates furnish a serum which is preventive and curative in its action. Rabbits which have a few hours before inoculation received a dose of this serum resist the action of the poisonous streptococcus above mentioned. Moreover, the inoculation of the culture may precede the administration of the dose of serum with the same result—survival. M. Roger stated at the same meeting that M. Charrin and himself had vaccinated rabbits and then a horse against the streptococcus, and found that the injection of the serum of these vaccinated animals conferred a certain immunity against the action of the streptococcus. A woman affected with puerperal fever, whose temperature had oscillated around 39° C. for a week, and whose condition was most serious, was given an injection of 8 c.c. of the serum without benefit. The next day double the quantity was injected, and on the third day 25 c.c. were given; on the fourth day the temperature had fallen to normal and remained so, the woman quickly recovering. Another puerperal case, also in M. Charrin's wards, but of a milder type than the first, was similarly cured. What struck MM. Roger and Charrin more particularly was the prompt improvement in the general condition and the sensation of *bien-être* experienced a few hours after the injection. It was noticed also that, contrary to the rule in puerperal septicæmia, the period of convalescence was extremely short in duration, the patients being out of bed in five or six days. MM. Roger and Charrin extended their researches into the region of another disease caused by the same micro-organism—viz., erysipelas. We know that erysipelas, when affecting the adult, is capricious in its evolution, but generally ends in recovery. In the newborn, however, erysipelas is almost invariably fatal. The above-named observers (MM. Roger and Charrin) have recently[1] had the opportunity of treating a case of the kind in the person of a weakly infant weighing 2600 grammes, and reared in an incubator in the special pavilion attached to M. Budin's wards at the Maternité. Recovery ensued in a few days. During the illness the weight of the child had fallen from 2780 grammes to 2600 grammes. Weight was, however, quickly gained, no less than 400 grammes being put on in thirteen days. The method has also been tried on a woman aged twenty-five years, who, twenty days after her confinement,

[1] Société de Biologie, March 30th.

was attacked by pseudo-membranous sore-throat, complicating measles. Bacteriological examination revealed the presence in the secretion of the streptococcus and the staphylococcus. The woman was well in a few days. The serum appears to be quite destitute of toxic properties, for no untoward symptoms were noted during the treatment. M. Marmorek further reports[2] that he has, in conjunction with Dr. Chantemesse, applied the method to the treatment of forty-six cases of erysipelas. All ended in recovery, excepting in some case in which death was accidental. Twenty-four hours after an injection of 10 c.c. the temperature had fallen, and complete recovery occurred in forty-eight hours. It is stated that this treatment prevents albuminuria consecutive to erysipelas, and that when present the serum treatment promptly effects its disappearance. The profession will await with eager curiosity the further developments of the application of this new arm directed against the inroads of that mischievous germ, the streptococcus. Should M. Roger's hopeful anticipations be realised serotherapy will have made one more step in advance, and suffering humanity will have good reason to be thankful to such ardent workers as Richet and Héricourt, Charrin and Marmorek, and especially to Roger himself, who can claim the credit of the discovery.

The Purification of Filters.

Dr. Guinochet, Pharmacien-en-chef of the Charité Hospital, Paris, has recently indicated the precautions necessary for the continued efficient working of filters, and more especially of the Chamberland-Pasteur apparatus. In the case of ordinary filters the *bougies* must be unmounted, well brushed, and rinsed in cold water, and then plunged, totally if possible—but total submersion is not necessary—for a liberal quarter of an hour in a 1 in 1000 solution of permanganate of potassium. The *bougie* is then removed from the solution, well shaken, and finally rinsed once more in cold water and replaced in the filtering apparatus. The water that filters through the *bougie* is at first coloured, but after a few minutes' working it becomes quite clear, and can be utilised for drinking purposes. This method of sterilisation may be employed for porcelain, stone, or asbestos filters, and is said to be as efficient as it is simple, the permanganate sterilising in the cold every part of the filter. Beyond this it cleanses the porcelain *bougies* by oxidising the glutinous organic matter which chokes the pores. The small quantity of the permanganate that may remain after the sterilising process is over in the pores of the filter is in nowise hurtful to health. But whatever method of sterilisation may be employed the flow is gradually lessened. Dr. Guinochet finds that if after the permanganate process (using this time a 5 per 1000 solution) the same manœuvre be repeated with a 1 in 20 solution of bisulphite of sodium the normal flow was restored. The bisulphite solution is prepared by adding 50 c.c. of a solution (density 1·300) of the commercial salt to 950 c.c. of water. It is as well to add to this solution each time it is used for this purpose 5 c.c. of ordinary HCl per litre. A Chamberland-Pasteur filter may be permanently kept microbe-free by (1) a daily superficial scrubbing with a brush; (2) a weekly (or bi-weekly, if the water to be filtered be very impure) sterilisation with a cold 1 in 1000 permanganate solution; (3) a trimestrial and thorough cleansing with, first, a 5 in 1000 permanganate solution, and then a 1 in 20 bisulphite solution.

A Protest by Hospital Surgeons.

Acting in direct opposition to the Commission de Surveillance of the Assistance Publique, the Prefect of the Seine has, at the instigation of Dr. Seyron (Director of the Assistance Publique), signed the following new regulations: (*a*) Paris is henceforth divided into hospital districts. A patient cannot in future be received into any other than the hospital of the district in which he resides. (*b*) The out-patient departments are transferred from the hospital physicians and surgeons and confided to young practitioners who have completed their term of service as *internes*. These regulations, which have not even been submitted for the approval of the Conseil Supérieure of the Assistance Publique, have raised quite a storm, and elicited a lively written protest signed by every hospital surgeon in Paris. The signatories contend that the restriction of the right of the poor hospital patient to choose the establishment wherein, and the surgeon by whom, he may desire to be treated is a violation of a liberty which every poor man has a right to enjoy. They point out that certain surgeons gain celebrity for certain operations, and they regard the new territorial system as an arbitrary measure *vis-à-vis* of the poor man, who should have as much right as the rich man to choose his own surgeon or hospital. With regard to the dissociation of hospital surgeons and the out-patient rooms, the signatories question if the substitution of young and inexperienced practitioners for themselves will benefit the poor applicants. They maintain that in selecting for admission into their wards the more acute and operable cases they are acting quite reasonably. As for the *chronics*, they say that it is for the Assistance Publique to provide for their hospitalisation and not for them (the surgeons) to encumber their wards with sufferers who may lie therein for months unbenefited. In conclusion, the signatories complain that their advice was never asked in the matter, and they wash their hands of the consequences that are bound to result from the application of what they characterise as a mischievous innovation.

[2] Ibid.

Le Banquet de l'Internat.

This annual function will take place at the Hôtel Terminus on the 20th inst. The *internes* of the Paris hospitals—in other words, the *élite* of the students of the Faculty—will gather to dine under the genial presidency of the ever-popular Professor Tillaux, who will doubtless receive a warm reception from his young friends.

April 16th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Puncture of the Spinal Canal.

AT one of the last sittings of the Berlin Medical Society Professor Fürbringer read a paper on Puncture of the Spinal Subarachnoid Cavity. This operation is performed both for diagnostic and for curative purposes. The puncture is made through the ligaments of the third and fourth lumbar vertebral arch by means of a rather small trocar with a long cannula. The fluid must not be aspirated, but must be allowed to flow freely through the cannula. The pain of the operation is sometimes rather severe, but totally disappears after a short time. Professor Fürbringer has made punctures in eighty-six patients more than 100 times without any ill effect. By this means the bacillus of tuberculosis was found in thirty of the thirty-seven cases of tuberculous meningitis, where the diagnosis was doubtful. In twenty-seven of these cases the diagnosis was verified by necropsy. He is therefore of opinion that this operation will become of the same value for the diagnosis of tuberculosis as the microscopical examination of sputum or exploratory punctures of the pleural or peritoneal cavities. In one case of acute idiopathic cerebro-spinal meningitis the presence of pus was recognised. In one case of acute meningitis, for which no obvious cause could be found, the fluid contained an enormous mass of bacteria which appeared to be identical with the pneumococcus. In all cases of increased cerebral pressure the pain was relieved, but only for a short time; in particular, four patients suffering from cerebral tumours felt better after the operation. Professor Fürbringer's results were confirmed by Professor Fränkel, Professor Heubner, and others. Dr. Freyhan said that the proportion of albumen in the fluid obtained by puncture could be easily ascertained. This, he asserted, was of great diagnostic importance, as the proportion of albumen was always greater in cases of meningitis and cerebral tumour than under normal conditions. Sugar was never found in the fluid. In cases of cerebral apoplexy where the blood had penetrated into the cerebral ventricles the fluid was found to contain a large amount of blood; there was much less blood in cases of subdural hæmatoma, and none at all in epidural hæmatoma.

The German Medical Press Union.

A Union of the Medical Press was formed at the last meeting of the German Association, and its rules are now published in the medical journals. Its aims are to raise the position and increase the influence of the medical press and to support its interests on every occasion, especially at medical congresses and meetings. To this end the union makes a claim to be represented on the committees of congresses and to exercise an

influence on their organisation. It also intends to facilitate the work of the press by appointing special union reporters at the medical societies and providing the journals belonging to the union with these reports. It will also join in protecting the general interests of the profession and the press against encroachments on the part of the authorities and the public. Editors of medical journals which have been in existence for at least two years are eligible for membership. During 1895 the seat of the union will be in Berlin, Professor Eulenburg (*Deutsche Medicinische Wochenschrift*) acting as chairman, and Professor Posner (*Berliner Klinische Wochenschrift*) as secretary. The editors of all the important medical journals have already joined the union.

The Cycle as an Ambulance Carriage.

A new ambulance carriage has been invented by Dr. Hönig of Berlin. It is not drawn by horses or men in the ordinary way, but is propelled by cyclists and consists of a kind of litter resting on a frame with five wheels, three in front in the form of an ordinary tricycle, and two at the back. The drivers accordingly sit one at each end of the litter, which is covered by a removable roof with little windows and a pneumatic bell, so that the patient can communicate with the drivers. Beneath the litter are boxes for dressing materials, instruments for first aid, &c. Dr. Hönig suggests that his invention would be useful in small towns for which a horse ambulance is too expensive. It brings the surgeon and his assistant very quickly to the scene of an accident and enables them to remove the patient to the hospital without loss of time. The general opinion here is that the new system will require a greater proficiency in the art of cycling than the majority of medical men possess. The carriage was shown in the drill-ground of the fire brigade to surgeons attached to hospitals and the police, as well as to officers of police and the fire brigades, and to other gentlemen connected with the ambulance service.

The late Professor Lothar von Meyer.

Lothar von Meyer, Professor of Chemistry at the University of Tübingen, died in that town on April 12th. Although he was not a medical man his name will ever be connected with medical science, and especially with physiological chemistry. He was the first to prove the action of hæmoglobin in the function of respiration, its affinity for oxygen and for carbon monoxide (CO). He also made valuable researches on the poisonous effects of carbon monoxide. Latterly he abandoned medical chemistry and devoted himself exclusively to theoretical chemistry. He was born in 1830 in Varel (Oldenburg) and became successively *privat-docent* in Breslau, Professor in Göttingen, and Professor in Tübingen.

March 15th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Professor Celli on Bathing.

Is it as well known in the British Isles as it is on the Continent that an English physician is the originator of sea-bathing? It is a fact that not before 1750, when Dr. Richard Russell published his treatise on the virtues of sea water (or, to give it its full title, "De Tabe Glandulari et de Usu Aquæ Marinæ in Morbis Glandularum") were the healing virtues of the sea-bath understood or the practice of sea-bathing generally resorted to. Till then there seems to have been a horror of the sea; and, indeed, we know that in mediæval times a compulsory dip in its waters was a sentence often passed on the public offender. In the earlier decades of last century Western Europe suffered heavily under "king's evil," the popular name for that tuberculous affection which scourged all classes, from peer to peasant. Dr. Russell, a Sussex practitioner, had observed that dwellers on the coast, guided by instinct apparently, used to drink of the sea water, bathe in it, even wash their sores in it, and bind them up with seaweed. Having noted the practice long enough to be satisfied of its efficacy, the medical man did not wait for a chemical or physiological theory of its *modus operandi*, but began to prescribe it to his patients with the best results. His treatise, mentioned above, diffused his experience among his contemporaries, so that silently but steadily the English coasts became dotted with villas and cottages, the nucleus hamlets which, from their sea-bathing advantages, grew into towns. By the close of the century Germany had adopted the practice, then Belgium, and then France, one of whose physicians, Dr. Lefrançois of Dieppe, in 1812 wrote a book on the virtues, internal and external, of sea water, and raised his native town into a much-frequented health resort. From bathing in the sea bathing in fresh water came to be more largely indulged in, till Dr. Andrew Combe's "Principles of Physiology applied to the Conservation of Health" (Edinburgh, 1834) set forth with fascinating clearness the vital importance of the skin as a great waste pipe, and the practice of "tubbing" became general in the British Isles, whence it has slowly found its way into the more refined classes abroad. True, this latter was a revival of the ancient Roman use of the bath, which had long lapsed into desuetude; but it was a revival on sound physiological principles, to which it owes the almost fanatical rigour with which it is maintained in all well-ordered British households. Wherever available, in suitable weather the running stream is justly preferred to the bath from the pipe, and all over Europe the great rivers are being more and more utilised for what is at once a hygienically valuable and physically pleasurable exercise. These and a host of cognate facts and considerations were all *en évidence* before the distinguished audience addressed the other evening by Dr. Angelo Celli, Professor of Hygiene in our university, whose participation some five years ago in the International Congress of Hygiene and Demography held in London reflected so favourably on the Roman school. But the point to which he drew the attention of his hearers with most insistence was the quality of the river water in which bathing is practised, the principles it contains in solution, even the solids that it carries down with it from the soil through which it flows. The Tiber, he showed, has chemical properties which explain its health-giving advantages for the bathers in it—the sand to which it owes its colour, transported from Tuscany and deposited by floods along its banks, having a distinctly antagonistic effect on the "bacteri malarici"—so much so, indeed, as to make its course "una vera zona coibente" (a true restrictive zone) against the poison. Statistics were adduced to demonstrate that the health of the Tiberine population, even where the river flows through malarious tracts, is better than that of the people who occupy regions unhaunted by the fever. Its wealth in carbonates and salines gives it an exceptional advantage over its sister streams, rendering it, as a bathing medium, more akin to the sea than any other Italian river. Its very density is, *per se*, another of its virtues, and brings it nearer the mud bath than most of its rivals having an equally swift and steady flow. Swimming under such conditions, especially in sultry weather when the relaxation of the pores admits of a freer action on and through the skin, is, he contended, one of the most beneficial exercises open to youth, of which the exceptionally favoured students of Rome were, he was glad to think, ever ready to avail themselves. The address, coming from a practical physiologist and scientific sanitarian like Professor Celli, carried conviction to an audience in which the lay as well as the professional public was largely represented, and his colleague, Professor Postemski, who holds the chair of Clinical Surgery in the University, was but the spokesman of all present in thanking the lecturer for his vindication of the Tiber as a bathing ground—a vindication, be it added, not more effective than opportune. A distribution of prizes followed for the greatest proficiency in swimming, and the names of the winners afforded gratifying proof that the health-giving pastime is not incompatible with the steadiest application to university work, whether in the class-room or the clinical ward.

April 16th.

RUSSIA.

(FROM OUR OWN CORRESPONDENT.)

The Effect of Cold on Diphtheria Antitoxin.

ALTHOUGH in a temperate climate the question of the effect which low degrees of temperature have upon diphtheria antitoxin may not appear one of great practical importance, it is very distinctly so in a country like Russia, where for half the year the thermometer hovers about the Fahrenheit zero, and where, consequently, packets of the

serum sent through the post may be exposed to excessive variations of temperature. Two observers have published the results of experiments undertaken to test the effect of cold upon the serum, particularly with regard to its antitoxic properties. It is impossible to quote the details of these experiments here. The results were as follows. Dr. Gorianski, working in the Imperial (Oldenburg) Institute of Experimental Medicine in St. Petersburg, concluded that "serum which has undergone prolonged exposure to low temperatures loses part of its anti-diphtheritic properties. This loss is considerable, for a quantity of serum one and a half times greater than the maximum dose was unable to neutralise a minimum fatal quantity of diphtheria toxin." In these experiments the serum was exposed to temperatures varying from + 29° to − 4° F. Dr. Rojanski, on the other hand, whose experiments were done in Professor Filatof's laboratory at the Children's Clinique in Moscow, came to quite different conclusions. He found no difference between serum which had been exposed to cold and that which had not. "From certain experiments," he writes, "it might even be concluded that serum which has been exposed to cold has stronger antitoxic properties than that which has not." He is careful, however, not to commit himself to this conclusion. The discrepancies between his own and Dr. Gorianski's results he attributes to individual differences in susceptibility to the diphtheria poison in the guinea-pigs experimented on. It should be added that Dr. Gorianski used Behring's serum, and that this became cloudy after exposure to cold; while Dr. Rojanski used serum prepared by Dr. Gabritchefski in the Moscow Bacteriological Institute, and this remained throughout quite clear.

The Perm Zemstvo Asylum Case.

A particularly bad case of ill-treatment of asylum patients by their attendants recently came to light in the town of Perm, the capital of one of the most easterly governments of Russia in Europe. It is satisfactory to be able to add that exemplary punishments have been meted out to the offenders. The incidents occurred in the Asylum of the Perm *Zemstvo*. The superintendent, an army *feldscher* named Mymrin, on the night of Feb. 26th (during Carnival week) sent out for a magnum of *vodka*, which he and five ward attendants proceeded to drink. During the night a patient who had been making a noise was struck by one of the attendants; the patient struck back, and a fight followed, in which the four other attendants and two other patients joined. The attendants, who were probably intoxicated, beat the three patients so severely that two of them subsequently died. The superintendent, though awakened, refused to interfere. The court before which the case has been tried has inflicted the following sentences: the attendants are to undergo four years' imprisonment with hard labour, and the superintendent is condemned to exile to Siberia, with deprivation of all rights.

Trional, Chloralose, and Somnal as Hypnotics.

Dr. Khmiélefski of Odessa published in a recent number of the *Meditzinskoé Obozriénié* an instructive article upon the relative value of trional, chloralose, and somnal as hypnotics. He found that in asylum practice trional is a fairly certain and rapid sleep producer, but that it is contra-indicated in melancholia, hypochondriasis, or whenever any mental depression is present. It should be exhibited in 1 gramme doses, which may subsequently be increased. Chloralose is somewhat less certain in its action; the amount required to produce sleep varies much in different cases and at different times in the same person. It acts more rapidly than trional, but the sleep is less prolonged. In doses larger than 0·5 gramme slight symptoms of poisoning (spasms, &c.) frequently appear, but they soon pass away, and need not cause alarm. It never causes headache or other unpleasant after-effects which sometimes follow the use of trional. It may be given in cases where trional is contra indicated, as in melancholia, hypochondriasis and psychoses accompanied by depression. If there is any gastro-intestinal disorder chloralose is, it is stated, almost the only hypnotic which can be given for a prolonged period without harm. Somnal was found in the few cases in which it was given to be a valuable and reliable drug. It produced sleep indistinguishable from natural sleep. In some respects it possesses advantages over trional or chloralose. It is, however, contra-indicated if any gastro-intestinal disturbance be present, as it tends to increase this.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Insuring the Lives of Children.

IN the discussion of a Bill before the Massachusetts Legislature prohibiting insurance companies from writing policies upon the lives of children under ten years of age, in that child-insurance is an incentive to crimes, a member of the Society for the Prevention of Cruelty to Children said that she had found families where the children were deprived of the most ordinary necessaries of life, while the money for the insurance of a dying child was set aside awaiting the call of the agent. She knew of a case where the money received for the death of a child was spent on unnecessary display at the funeral, and she could not induce the parents to divert a cent of it to the purchase of food for other children who were suffering for the want of it and were receiving charity. She also told of a mother who, while one child lay dead, was lamenting that two younger ones and her phthisical husband had not been taken instead, because they were all insured and were not wage-earners, while the dead one was. A girl fourteen years of age, so emaciated that the witness could span any part of her arm with the fingers of one hand, was taken away by the society from her parents to prevent them from starving her to death, and it was subsequently learned that her life was insured, and the witness believed she was being murdered to secure the insurance money. This system results in children being deprived of the necessaries of life to secure money at their death. They are thus compelled to pay for their own funerals. Who was benefited by such an insurance investment? Not the child, for it is half starved during its brief life, and can receive nothing when it is dead. Not the parents, for after depriving them of the necessaries of life they get nothing but a white coffin and a hearse. But it is the insurance companies that make large sums of money for themselves and agents out of this method of extorting money from the poorest classes of people. On the part of the insurance companies it is represented that the mortality among insured children is less than among those who are not insured, that the average policy upon the life of a child less than ten years old is not more than would pay the expenses incident to a funeral, and that people from all classes in all parts of the country take advantage of the system.

The Growth of the Camphor Tree in California.

There is an effort being made to grow the camphor tree in California, which gives some hope of the transference of the world's commerce in that gum from Formosa to the United States. Camphor sold twenty years ago at ten cents a pound, but is now over a dollar a pound, owing to the destruction of trees in Formosa. The report of the United States Department of Agriculture states that the large and increasing quantities of this drug consumed in all civilised countries make the question of its continuous production and regular supply a matter of considerable importance. It is a well-known fact that the sublimation of the crude camphor from the wood is conducted in a primitive, careless way, which causes great waste. The camphor laurels of Formosa are gradually being destroyed under the careless system employed by the Chinese gatherers. In fact, they have been entirely exterminated along the seaboard, and the wood is now obtained from the forests along the frontier, between the settlements of the Chinese and the inland mountainous regions still occupied by the aboriginal population. The camphor gatherers are thus continually exposed to the assaults of the natives, and this interrupts the prosecution of the industry. No attempts are made towards planting other trees to take the place of those destroyed, and a sufficient quantity of the drug is obtained only by constant encroachment upon the territory of the Formosans. This destruction of the trees still further in the interior at every new move gradually exhausts the supply.

Death following the Injection of Antitoxin.

The death of two persons immediately following the injection of so-called antitoxin excites a profound interest in the medical profession. The facts are as follows. A boy from the country while visiting his uncle in Brooklyn developed diphtheria; as he gradually grew worse under treatment the physician obtained a bottle of antitoxin. An injection of this fluid was made, and the boy died

three hours after. On the following day a seventeen-year-old daughter of the uncle complained of a sore-throat. The physician obtained another bottle of the antitoxin, and it was administered. After receiving the injection the girl said she felt a tickling sensation all through her body. She then fell on the lounge in convulsions and was dead in ten minutes, despite the physician's efforts to save her. Her face turned black almost immediately after receiving the fluid. The physician states that the girl's death was a mystery to him, and he could only account for it by crediting it to some powerful poison in the bottle of antitoxin. He had used the remedy for some time with gratifying results, and always got it at the same place. The colour was the same as that he had used, being pink. He had never witnessed such a terrible death. There had been a mistake somewhere in bottling the fluid. The amount injected was between two and three drachms, which came in each bottle. The bottle was put up in a box in Germany, and bears the date of shipment, Jan. 30th last. The necropsy revealed nothing abnormal.

Inspections at Quarantine by Electric Light.

The rules regarding quarantine inspection have heretofore required that they should not be made between sunset and sunrise. This rule often caused great inconvenience to passenger ships. Frequently they would arrive just after sunset in the summer, and the passengers would be compelled to remain on board from eight to twelve hours, often in sight of their homes. The health officer, after consultation with the managers and agents of the principal steamship companies in the transatlantic passenger trade regarding the inspection and clearance of passenger and other vessels at night, conceived the idea of inspecting immigrants by the aid of powerful electric lights. This is to be done by having a detached cluster of burners arranged so that it can be carried on board of a steamer and connected by a switch or other apparatus with the electric lighting system of the steamship. To perfect this arrangement all of that class of ocean-going passenger vessels known as express steamers will be fitted with a connecting arrangement of switches, to permit the connexion of the health officer's cluster of burners. This system will come into effect immediately, and all such steamers will be passed, provided they arrive at quarantine before nine o'clock in the evening. Another important result of this method is the prompt boarding of all vessels subject to quarantine. A man is stationed where he can see the approach of incoming steamers, and it is his duty to give immediate warning of an approaching vessel and the boarding-boat promptly goes towards it. It is not compelled to anchor, but proceeds at slow speed, with sufficient headway to keep steerageway on the vessel.

Powers of Health Boards.

Two persons recently arrived in Brooklyn from places infected with small-pox whom the health board quarantined for observation during the period of incubation. The case was brought into the courts, and the higher court sustained the board.. It held that as these persons came from infected places they were liable to communicate the contagion and hence were proper subjects for isolation and detention, which was clearly within the scope, powers, and duties of the board to enforce. The prevention of small-pox is of such paramount importance as to justify all reasonable means for its accomplishment. The propriety and wisdom of the course pursued by the board is beyond criticism; its acts have all been within the lines of statutory authority, and they have been discreet and in evident good faith in the presence of an impending pestilential danger.

March 31st.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

Annual Reports of Hospitals.

THE annual report of the Sydney Hospital showed the amount of work done at this institution. During 1894, 3266 in patients were admitted, and the average number of beds occupied was 250, the largest number occupied at one time being 285. Of the admissions, 1401 were urgent cases without any recommendation, 1197 had Government orders and 182 subscribers' orders, while 486 contributed to their maintenance. The percentage of mortality on admissions was 11·8, and of 297 deaths 111 died within twenty-four hours of admission. In the out-door department there were 113,968 attendances. The directors state that the fact that the expenditure of last year has been kept down to its fullest possible limit, without detriment to the welfare of the patients, is due to the watchful care and economy exercised by the medical superintendent, Mr. George Armstrong. From the balance-sheet it appears that the excess of expenditure over income was £1217. The annual report of the Hospital for Sick Children, Glebe, Sydney, showed that during the year 486 patients had been treated in the general hospital, of whom 389 had been discharged cured or relieved, 16 had been discharged incurable or unrelieved, 33 had died, and on Dec. 31st 50 remained in the institution. In the diphtheria cottage 143 patients had been treated; of these 73 had been discharged cured, 68 had died, and 2 remained in the hospital on Dec. 31st. There had been 1319 patients in the out-door department, with 4256 attendances. The increase in the work of the institution had been remarkable, the cases treated in the general hospital having been one-third as many again, and the out-patients' attendances more than twice as many, as during the previous year. The balance-sheet showed that the patients' payments amounted to £405 17*s.* 9*d.* and public donations and subscriptions to £1497 1*s.* 9*d.* The expenditure was £4185, of which the sum of £3027 12*s.* 10*d.* was for hospital maintenance. The Chairman, Mr. Justice Stephen, in moving the adoption of the report, said that the fears entertained with regard to the establishment of the diphtheria cottage had not been realised, and it was clear that while it benefited the whole community it did not inflict any injury on the inhabitants of Glebe. The medical officer's report showed that during 1894 there had been an increase of 124 admissions over the returns of the previous year. No less than 80 different diseases had been treated, and there had been 50 cases of hip disease, 40 cases of typhoid fever, and 40 cases of pneumonia. Operations requiring the administration of an anæsthetic numbered 300. There had been 143 cases of diphtheria, 73 of which were cured, and 68 patients, or 47·5 per cent., died. Of the 68 deaths 16 or 23·5 per cent., occurred within twenty-four hours after admission. The Government had arranged for regular shipments of diphtheria antitoxin from Germany, and the remedy would be supplied to the hospital. Dr. Tidswell had been appointed Government Bacteriologist, one of whose duties would be the manufacture of antitoxins.

Inquests in Melbourne during 1894.

During the year 1894 381 inquests were held in the city of Melbourne. Of these, 125 were on deaths due to accident, 38 were suicides, 12 by gunshot wounds, 6 by poison, and 6 by hanging. Infanticides numbered 25, a comparative decrease, probably due to the action of the Infant Life Protection Act. Drink was responsible for a large share of the deaths. Of 38 suicides 11 were excessive drinkers, and of the 125 accidental deaths 21 were due to drink. Of those found dead 7 were drinking heavily when last seen alive, 11 died from alcoholic pneumonia, and 8 well-known drunkards died from cerebral hæmorrhage. The total of the "drink cases" was 71. The inquests under the Infant Life Protection Act on infants boarded out numbered 74.

Charge of Malpractice.

Dr. Henry M. Fenwick, of Carlton, Victoria, who was recently committed for trial by a coroner's jury on a charge of manslaughter, was further charged at the Carlton Police-court, in conjunction with two nurses, with performing an illegal operation on two separate occasions. The patients operated on and a nurse who was present gave evidence against Dr. Fenwick, who was committed for trial.

Case of Anthrax.

What is said to have been the first case of anthrax in the human subject in Victoria occurred recently in the person of a stockowner, who had been engaged in inoculating sheep with Pasteur's vaccine against the disease, and while so doing accidentally ran a needle into his hand. Anthrax œdema set in, and the anthrax bacilli were found in the tissues. He was promptly treated with free incisions and the application of pure carbolic acid, and recovered without constitutional symptoms.

Hospital Nurses' Hours of Duty.

A question was recently asked in the Victorian Parliament as to the hours during which nurses in the metropolitan hospitals are on duty, and the Premier replied that from inquiries he found the average was eleven hours per day. This, however, is reckoning from the time they enter the wards till they go to

bed, and includes meal times. At the Melbourne Hospital the actual working hours are about eight and a half. At the Alfred Hospital each nurse is allowed a clear twenty-four hours off duty every week in addition to a fortnight's annual vacation. Some correspondence on the subject has been published in the daily press, some nurses affirming that the hours are too long, others that they are not, and the opinions seem about equally balanced.

Cases of Cerebral Surgery.

At the last meeting of the Medical Society of Victoria ten cases of cerebral surgery were shown. The first was a patient aged thirty, under the care of Mr. G. A. Syme. When first seen in August, 1893, the symptoms were epileptiform, convulsions beginning in the right side of the face, spreading to the right arm and leg, and then becoming general. They were preceded by a sense of constriction in the throat and a numb feeling in the tongue and right side of the face. For some days after the attack the right side of the face and the tongue were paralysed, and the speech thick. Vision, visual fields, and optic discs were normal. There was no vomiting, and no loss of sensation. There was no personal or family history of tubercle, and no history or evidence of syphilis. It was concluded that there was some irritation of the cerebral cortex over the face and tongue centres, probably a tumour, and operation was advised, but not agreed to until Oct. 22nd, 1894, when the patient had become much worse, suffering from aphasia and agraphia, paralysis of the right side of the face and tongue, and paresis of the right hand. The fits had become more frequent and more severe, and he had pain in the left parietal region. The skull was trephined over the face and tongue centre, and a tumour 2·3 by 1·9 inches in size and two ounces and a half in weight removed. It grew from the dura mater and pressed on the lower portion of the ascending frontal convolution and the posterior part of the second and third frontal convolutions. The tumour was encapsuled and microscopically was a small round-celled sarcoma. Speech and motion were gradually recovered, and when shown nearly four months after operation the paresis of the face and tongue was hardly noticeable, the speech was good, he could write perfectly, had no pain, and had had no fits. There was no evidence of recurrence. The second case was under the care of Dr. W. Moore. The patient, aged nine, was suddenly seized with a convulsion, and became unconscious, with right hemiplegia. She had suffered from a discharge from the left ear for several years, which became worse, with earache and pain on the left side of the head ten days previously. The temperature was 102·6° F. A diagnosis of temporo-sphenoidal abscess was made, and the skull trephined in the usual way. The brain was explored in several directions with a grooved director and a trocar and cannula, but no pus was found. After the operation the temperature became subnormal, and the pulse 60. The paralysis and aphasia remained. Five days afterwards the wound was reopened and the brain again explored, when pus to the extent of about two ounces was evacuated from the temporo-sphenoidal lobe. The abscess was drained, and the patient gradually improved, regaining speech and power in the leg, but the arm remained weak, with some contraction of the fingers.

The Etiology of Summer Diarrhœa of Infants.

Dr. R. R. Stawell has been investigating this subject in Melbourne and arrives at pretty much the same conclusions as those reached by inquiries into the causes of this very prevalent complaint in other parts of the world. He has been unable to satisfy himself that any atmospheric condition other than increased temperature has any appreciable or constant influence upon the disease. The increased temperature acts as a causative factor, because at about 60° F. putrefactive processes and toxicogenic germs first become active, and not by causing great depression in the patient, as the charts he had made out showed that the greatest prevalence of the disease was not at the time of the greatest heat; the breast-fed infants are not affected. He thinks there is a small number of delicate children who suffer from diarrhœa in consequence of putrefactive changes in sound food after it has been swallowed.

Two Cases of Didelphic Uteri, with Hæmatokolpos and Pyokolpos.

In the February number of the *Intercolonial Quarterly Journal of Medicine and Surgery* Dr. F. C. Batchelor of Dunedin records two cases of the above rare abnormalities. In each case there was a double uterus and a double vagina. Retention of the menstrual fluid occurred in the right vagina in one case and in the left in the other. As a result of distention a rupture occurred through the upper portion of the vagina in both cases, and an escape of the retained menses followed, but not completely. Subsequently septic changes ensued in the pent-up secretions, causing pyokolpos.

Obituary.

SURGEON-GENERAL SAVILLE MARRIOTT PELLY, C.B., F.R.C.S.

SURGEON-GENERAL PELLY, who died on April 3rd at Woodstock House, Lee, Kent, was the last surviving son of the late Judge John Hinde Pelly, of the Indian Civil Service and a brother of the late Major-General Sir Lewis Pelly, K.C.B., K.C.S.I., M.P. He was one of seven sons, six of whom entered one or other of Her Majesty's services, and three attained to the rank of general officers. Born in India, he was sent to England for education, and made his home with a relative, the baronet of the same name. He was then placed at Winchester, where, owing to the marvellous facility he had of getting out of scrapes he received the nickname of "Proof Pelly." As an instance of the good luck which never deserted him, he used to relate how that once, when staying with friends in Gloucestershire, he took compassion on a poor stray dog that had found its way into the grounds. Whilst in the act of fondling it he was startled by the arrival of the whole country side, armed with guns and staves, in search of this very dog, which was mad and had already bitten several persons. On leaving Winchester he began his medical education at the Bristol Royal Infirmary, where he was for some years dressing pupil under Mr. Birchard Smith, then the senior surgeon, and where an uncle on his mother's side was on the hospital staff. He next entered as a student of Guy's Hospital at the time when Bright and Addison were physicians, and Astley Cooper was still alive. It is interesting to note that Dr. J. G. Swayne, whose name is so intimately associated in all our memories with the Bristol Medical School, was a fellow student of Pelly both at Bristol and Guy's. He was a student when Sir Astley Cooper died in 1841, and was one of those who lined the way to the hospital chapel, in the vault of which the body of that distinguished surgeon is deposited. After finishing his professional studies he entered the Indian Medical Service, and was soon ordered to the front. He was present in July and August, 1843, with a field force under Major Blood in the southern parts of Sind, and served with the Sind Irregular Horse during Sir C. Napier's campaign in 1844–45 against the predatory tribes on the borders of Cutchee, and in the surprise and capture of Shahpoor on the night of Jan. 15th, 1845, being favourably mentioned in the despatches by Captain Jacob. He was present with the army of observation at Bhawalpoor under Sir C. Napier in 1846–47, and with the Sind Horse during the pacification of the frontier of Sind in 1847–48 under Major (afterwards General) John Jacob. He served with the 2nd Regiment of Light Cavalry in Rajpootana during the Mutiny campaign in 1857–58, and was present as senior medical officer at the attack on Nimbhaira, the action of Jeerun, and throughout the siege of Neemuch under Captain Simpson, joining afterwards in the pursuit of Tantia Topee with the column under Brigadier Parke. At the conclusion of the war he received the Indian medal and clasp for Central India. For many years he was resident in Sind, and when he was moved on to Poona the *Sindian* of that date contained the following paragraph: "Dr. Pelly will be much missed in the circle he leaves to-day. He is one of the oldest residents among us, having seen service since about the year 1844. He knows the country thoroughly and has watched the progress of its various communities from the first. We still entertain a hope that he may again return to Sind, where he is so well known and so universally popular." As he rose in his profession he became Inspector of Prisons in the Bombay Presidency, and at his suggestion the Government introduced gardening as prison labour, whereby a great saving was effected; for not only was the health of the prisoners greatly benefited by this open-air exercise, but all the vegetables required by the inmates were thus obtained without purchase. When

the Abyssinian expedition was determined upon he was selected for the post of principal medical officer of the Indian Medical Department, and he served throughout the campaign in 1867–68 under Sir Robert (afterwards Lord) Napier. For his services during this expedition he was recommended for the K.C.S.I., but as it was found that this knighthood could only be conferred for services rendered in India he was rewarded by a Companionship of the Bath. Meanwhile he had risen in his profession to be Deputy Inspector-General of Hospitals in the Bombay Presidency, and he retired as Inspector-General in 1870. After his retirement he lived for many years in Dublin, but came to London a few years ago to be near his brother, who was at that time representing Hackney in the Conservative interest. At the quincentenary festival of Winchester College, held two years ago, Surgeon-General Pelly was among the oldest of the Old Wykehamists present, and this visit to the scenes of his boyhood afforded him the keenest sense of pleasure. He was a man of a most warm-hearted and genial disposition, making friends wherever he went, being universally respected for his uprightness and gallantry. Firm in will and strong in action, brave and courteous, punctilious in matters of honour, yet kind, gentle and forgiving, he possessed all the qualities most to be admired in a soldier and a surgeon. He retained to the last a very remarkable intellectual vigour and an activity of body worthy of a man twenty years younger. In his retirement he amused himself chiefly with his lathes, turning out all kinds of articles useful and ornamental, having always had a strong taste for engineering. Among other things he made an electric clock, every wheel of which he forged with his own hands, and he had been at work at an electric stethoscope which was to enable every member of a class to listen to the same heart whilst the physician was demonstrating its defects. He enjoyed perfect health until five weeks before his death, when he was first seized with angina pectoris, associated with some fever, apparently influenza. Dr. Green, of Lee, who attended him, discovered a mitral bruit and gave him relief by medicine and rest; but attacks of cardiac asthma became frequent, and a week before his death Dr. Pye-Smith saw him in consultation. He died suddenly (as had been anticipated) whilst sitting in his chair, on Wednesday, April 3rd, aged seventy-six. He leaves a widow, two sons (the Rev. Stanley Pelly and Captain Saville H. Pelly), and two daughters.

GEORGE HENTY, M.D. ST. AND., M.R.C.S. ENG., CAMDEN TOWN.

THE death of Dr. Henty removes from north London an old practitioner, aged seventy-seven, who took an active part in all that interests the profession and in much that nterests the public. Dr. Henty was born at Chatham and educated at the Grammar School, Rochester. He was afterwards assistant for six years in Princes-street, Hanover-square, to Dr. McDonald. Thereafter he qualified and went into practice at West Malling, and afterwards at Newington, Kent. In the latter place he lived sixteen years, and was medical officer of health. He interested himself in getting a railway station built and other improvements. In 1865 he returned to London and settled in Camden Town, where he had been working until within a few days of his death, which was due to pneumonia; for some months past, however, his health had been much impaired. For seven years he was medical officer to the Aged Pilgrims' Society. He was also medical officer to the Foresters' club. Dr. Henty was an active promoter of the Great Northern and Central Hospital. He was a member of the committee. Though partly responsible for the clause in the constitution under which pay patients are now admitted, he strongly disapproved of the method by which that clause has been put into force. He was also lately hon. sec. of the N. District of the Metropolitan Counties Branch of the British Medical Association, and in this connexion exerted himself against all questionable methods of practice. For the year 1893–94 he was President of the North London Medical and Chirurgical Society. His genial nature and his large experience made his company always acceptable in medical circles.

JAMES JOHNSTON, M.B., M.R.C.P. LOND., M.R.C.S. ENG.

DR. JOHNSTON, who passed quietly away on April 11th in his seventy-second year, had for many years held a prominent place among the medical profession in Birmingham. He was the son of Mr. Thomas Johnston, a well-known inhabitant of the town, and studied medicine at Queen's College, becoming a member of the Royal College of Surgeons of England in 1844, and Bachelor of Medicine of London University in 1846. Having settled in Birmingham he in course of time came to have one of the largest practices in the town. About 1867 he went to live some miles away, at Wylde Green, a small place close to the ancient borough of Sutton Coldfield, of which town he was for three successive years elected warden. In 1874 he became a Member of the Royal College of Physicians and shortly after this was appointed honorary physician to the Queen's Hospital and to the Hospital for Children. In 1875 he was elected President of the Midland Medical Society, and in 1879 President of the Birmingham Branch of the British Medical Association. About 1887 he left Wylde Green and resided in Birmingham for the remainder of his life. Dr. Johnston lived an honourable, just, and useful life, and was universally esteemed. He was twice married, and four of his sons follow their father's profession.

WILLIAM METCALFE, L.S.A. LOND.

THE little village of Clapham, near Lancaster, has just sustained a heavy loss in the death of its medical man, William Metcalfe, L.S.A. Lond. The deceased had been ailing for nearly two years from obscure abdominal symptoms, which became accentuated some two months ago, and he gradually sank from exhaustion and died on April 8th at the early age of thirty-four. A necropsy showed the cause of death to have been stricture of the small intestine and melanotic sarcoma affecting the stomach and bowels. His terrible sufferings were borne with great fortitude. He was a student of St. George's Hospital, London, and in 1888 he entered into partnership with Mr. Bradley of Bentham, with whom he was connected at the time of his death. He was a successful practitioner and endeared himself to a large *clientèle*, who will long miss his cheery voice and smile.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced: Dr. Rinaldo Roeso, Lecturer in Forensic Medicine in the University of Rome.—Dr. Wladimir Tomsa, Professor of Physiology in the Bohemian University of Prague.—Dr. Richer, Professor of Therapeutics in the Amiens Medical School.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the First Examination of the Board in the subjects indicated at the quarterly meeting of the Examiners under the four years' regulations, viz:—

Part I., Chemistry and Physics:—

Bentley, Harry, Owens College, Manchester.
Cater, Joseph, King's College, London.
Cooper, Frank, Mason College, Birmingham.
Evans, John, St. George's Hospital.
Henerey, John Philip Edmund, St. George's Hospital.
Lindsay, Alexander William Crawford, St. Bartholomew's Hospital.
Macmaster, Hugh, Sydney University and Surgeons Hall, Edinburgh.
Oliver, Norman Henry, Guy's Hospital.
Owen, John Griffith, Charing-cross Hospital.
Russell, Francis John, London Hospital.
Simpson, Fred. Algernon, Cambridge University and St. Mary's Hospital.
Sykes, Reginald, Yorkshire College, Leeds.
Whyte, Frederick William, Queen's College, Belfast.
Willson, Arthur Herbert, Oxford University.

Part II., Materia Medica and Pharmacy:—

Agnew, Colville Smith, Charing-Cross Hospital.
Ayre, Frederick John, St. Mary's Hospital.
Carter, Wilfred Becher, St. George's Hospital.
Clarke, Huntley, St. Bartholomew's Hospital.
Collier, Robert Stanley, Yorkshire College, Leeds.
Corfield, Edward Carruthers, St. Bartholomew's Hospital.
Dakin, Thomas Burns, London Hospital.
Davies, Thomas John, Middlesex Hospital.
Day, James John, Middlesex Hospital.
Dearden, Charles Henry, Yorkshire College, Leeds.
Evans, David Edward, London Hospital.
Fanning, William Joseph, St. Thomas's Hospital.
Fergusson, James Herbert, St. George's Hospital.
Herbert, Herbert, London Hospital.

Marsh, Henry Rupert, Guy's Hospital.
Parker, Lionel Edmund Longworth, St. George's Hospital.
Prance, Charles Herbert Gouldsmith, St. Bartholomew's Hospital.
Prebble, Earnest Alfred, Guy's Hospital.
Raper, Henry Edward, University College, London.
Richardson, George Quintin, Trinity College, Dublin.
Rowland, Lewis Thomas Archibald, Guy's Hospital.
Rumbelow, Robert Charles, Middlesex Hospital.
Smart, Charles Henry, Mason College, Birmingham.
Smith, Hugh Victor, Guy's Hospital.
Todd, David Bansall, Guy's Hospital.
Trewby, Henry William, Middlesex Hospital.
Turnbull, Hugh Prideaux, St. George's Hospital.
Tyson, Edward, St. Bartholomew's Hospital.
Wakkie, Nicholas, private study.
Walker, John Norman, St. Thomas's Hospital.
Wood, Leonard, Mason College, Birmingham.

Part III.—Elementary Anatomy and Elementary Physiology:—

Adams, Edward William, Firth College, Sheffield.
Bell, Victor Emanuel Samuel, Cambridge University.
Bridger, John Dell, Guy's Hospital.
Brown, Charles Richard Verling, St. Bartholomew's Hospital.
Daniel, Peter Lewis, Charing-cross Hospital.
Davis, William Herbert, University College, London.
Du Heaume, Ernest Phillipe, St. Bartholomew's Hospital.
Dunston, John Thomas, Guy's Hospital.
Ennion, Octavius Robert, St. Mary's Hospital.
Hughes, John Worthington, Cambridge University.
Hutchinson, Frederick Ernest, Guy's Hospital.
Kellett, Orme Stirling, Cambridge University and London Hospital.
Knowlton, Alexander John, Middlesex Hospital.
MacMaster, Hugh, Sydney University and Surgeons' Hall, Edinburgh.
Mawson, Joseph Arthur, Yorkshire College, Leeds.
Pierce, John James, St. Mary's Hospital.
Plumley, Arthur George Grant, Guy's Hospital.
Pugh, Charles Grant, Middlesex Hospital.
Rae, Francis Lionel, Guy's Hospital.
Rooth, James Augustus, St. George's Hospital.
Scott, Charles Augustus, Charing-cross Hospital.
Thomas, Elijah Richard Lockwood, London Hospital.
Webb, Hugh George Stiles, St. Mary's Hospital.
Wilson, Graham Lionel John, St. George's Hospital.

Elementary Anatomy only:—

Bennett, Percy Moore Septimus, Middlesex Hospital.
Lewis, Lewis Evan, University College, Cardiff.

Elementary Physiology only:—

Evans, John, St. George's Hospital.
Hey, Samuel, Cambridge University.
Whyte, Frederick William, Queen's College, Belfast.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates passed in the Primary Examination, Part II., in April, 1895:—

Anatomy and Physiology.—F. Atthill, Charing-cross Hospital; B. E. G. Bailey, St. Bartholomew's Hospital; F. W. Chesnaye, St. George's Hospital; W. A. Davidson, Birmingham and London; E. Dodds, Sheffield; R. S. Elvins, Birmingham; F. R. Eddison, St. Bartholomew's Hospital; M. Joyce, Royal Free Hospital; A. F. Millar, St. Thomas's Hospital; C. S. Morgan, St. Bartholomew's Hospital; C. S. Ormsby, St. George's Hospital; M. Pantin, Royal Free Hospital; V. S. Partridge, Charing-cross Hospital; A. W. S. Sheldon, St. Bartholomew's Hospital; Rao K. Vittal, Madras; and J. M. Wood, Westminster Hospital.
Anatomy.—F. G. Aldrich, Charing-cross Hospital; W. E. Heal, Leeds; C. E. Hibbard, Guy's Hospital; E. A. Le Maistre, London Hospital; R. C. Morris, Birmingham; W. P. R. Newth, St. Thomas's Hospital; L. E. Owen, University College Hospital; and W. Taylor, Birmingham.
Physiology.—S. R. Bhagtani, Bombay; H. J. Brookes, St. Mary's Hospital; C. F. W. Dunn, Cambridge and Middlesex Hospital; C. F. Eddowes, St. George's Hospital; S. H. Greene, Charing-cross Hospital; A. Hay, St. Bartholomew's Hospital; A. R. Hoare, St. Thomas's Hospital; G. L. Meredith, London Hospital; H. Morris, St. Bartholomew's Hospital; A. Ross, Guy's Hospital; and D. Steele, Edinburgh.
Chemistry.—H. K. C. De La Motte, Charing-cross Hospital; E. Dodds, Sheffield; H. Greenwood, London Hospital; C. J. H. Riches, Middlesex Hospital; and E. Yoxall, Birmingham.
Materia Medica and Pharmacy.—S. C. Hague, Manchester and Edinburgh; and A. G. Lang, Guy's Hospital.
Materia Medica.—J. Freeman, Bristol.
Pharmacy.—O. Hall, Durham.

UNIVERSITY OF ABERDEEN: GRADUATION IN MEDICINE, April 8th, 1895.—The following candidates have received degrees in Medicine and Surgery:—

(* Indicates that the candidate has passed "with credit.")
(** " " " " with much credit.")

Degree of M.D.—Robert Haldane Cook, M.B., Portlethen, Kincardineshire (Thesis—"Fisher Life and Habits in relation to Disease, with special reference to the Question of Intermarriage"); James Duffus, M.B., Auchinblae, Kincardineshire (Thesis—"On Thyroid Feeding"); John Duncan, M.A., M.B., Bideford, North Devon (Thesis—"Some Consequences of Influenza"); Harry Edgecumbe Fernandez, M.B., Port Shepstone, Natal (Thesis—"The Clinical Aspect of Typhoid Fever in Natal"); John Robert Keith, M.A., M.B., Driffield, East Yorks (Thesis—"Bronchocele: its Etiology and Associated Circumstances"); and James Rust, M.A., M.B., London (Thesis—"The Parasite of Malaria").

The Degrees of M.B. and C.M.—Bruce Arnold Anderson, Stanley, Tasmania; John Farquhar Christie, M.A., Aberdeen; *William Cockburn, M.A., New Deer; Robert Lindon Collins, London; Horatio William Alex. Cowan, Inverness; James Cran, Rhynie; James Melville Paterson Crombie, Aberdeen; Robert Watson Cruickshank, Aberdeen; Thomas Donaldson Cumming, Aberdeen; Charles Haro'd Dyer, Blackpool; Alexander Fenton, M.A., Ellon; George William Rudd Fernando, Ceylon; James Fletcher, Uttoxeter, Staffordshire; Henry Rule Gardner, Portsmouth; Kenneth Gillies, M.A., Plockton, Ross-shire; William Gordon Grant, Elgin; *Henry McIlree Williamson Gray, Aberdeen; Douglas Vercoe Haig, Bombay; Peter Harper, M.A., Aberdeen; Louis James Helmrich, Aberdeen; George Hunt, Madras; George Hall Johstone, Auchterless; Vincent van Langenberg, Ceylon; William Lethbridge, Woburn Sands, Bucks; Robert Lindsay, Ballindalloch; **Arthur Hugh Lister, B.A., Leytonstone, Essex; Malcolm M'Bean, Kingussie; John Ross M'Mahon, Aberdeen; William Riddell Matthews, Aberdeen; James Moncur, Aberdeen; Andrew Mowat, Invergordon; William Murray, M.A., Peterhead; John William Myres, Guiseley, Leeds; Edward Marten Payne, Birmingham; William Marshall Phillip, Aberdeen; Philip Prebble, Blackburn, Lancashire; Alexander Robb, M.A., Peterhead; Andrew Rose, Nigg, Ross-shire; John Elmslie Skinner, Inach; Henry Elkington Smith, M.A., Peterhead; Frederick John Troughton, Cheltenham; William Samuel Ondeslowe Waring, London; *James Stratton Warrack, M.A., Stranraer; Alexander Wood, M.A., Stonehaven.

The following candidates have passed the Examinations for the Degrees of M.B. and C.M., but will not graduate until they have attained the necessary age:—

Alexander Falconer, Aberdeen; Charles Rilchie, Aberdeen; George Brebner Scott, Peterculter; Andrew Thomson, Elgin.

The following gentlemen graduated with honours:—

Highest honours.—Arthur Hugh Lister, B.A.
Honourable distinction.—William Cockburn, M.A.; Henry M. W. Gray; James S. Warrack, M.A.; William G. Grant; Kenneth Gillies, M.A.; Alexander Fenton, M.A.; Alexander Robb, M.A.

The diploma in Public Health has been conferred on:—

Alexander Anderson, M.A., M.B., C.M., Elgin (with credit).

RESULTS OF THE PROFESSIONAL EXAMINATIONS FOR MEDICAL DEGREES.

The following candidates have passed the first portion of the First Professional Examination (new regulations):—

Robert Carnegie, Robert Cranna, Charles Hunter, James M'Kay, Farquhar M'Lennan, Robert W. Reid, Henry W. M. Strover, David D. Whyte.

The following have completed the First Professional Examination (old regulations):—

James M. Keith, Ian Macquarrie, Harry M. Nicholls, Charles G. Perles, *Maurice G. Robertson, Alexander M. Watt.

The following have completed the First Professional Examination (new regulations):—

Henry Adams, Henry Barron, *Robert J. Cheves, Daniel Dewar, Frederick W. Ellis, **J. E. Esslemont, Thomas Fraser, W. E. Henderson, Robert F. Hutchison, *John Irwin, Herbert Johnstone, Forbes Kinnear, *Henry J. M'Grigor, A. D. M'Queen, Thomas N. Mitchell, *David R. Moir, George J. Pirie, *Charles B. Preston, Theodore F. Ritchie, Henry P. Sleigh, **Charles C. Slorach, James Smart, William E. Taylor, Alexander Urquhart, A. B. Walker.

The following have passed the first portion of the Second Professional Examination (new regulations):—

David H. Ainslie, William Ainslie, Robert Bruce, Alexander Chalmers, W. D. M. Donald, John Duff, Adam G. M. Fraser, Henry W. Garden, William S. Hall, Thomas C. Hynd, Alex. Ledingham, Thomas W. Lumsden, John S. Milne, Joseph Pozzi, Andrew A. Robb, John Roger, David Sivewright.

The following have passed the Second Professional Examination (old regulations):—

J. W. S. Attygalle, Percy H. Bannister, George Brown, David Buchan, William F. Cornwall, William Cromar, Alex. Cruickshank, D. H. Dantra, John Easton, Clarence I. Ellis, W. A. I. Fortescue, Reginald D. Gawn, James L. Gordon, John S. Greig, Thomas Harper, Clarence Haslewood, Alfred J. Hynd, John Innes, C. A. B. Laing, Donald Mackenzie, Alex. H. Mackie, James A. Milne, John G. Pirie, Alexander Presslie, John S. Purdy, Henry Sinclair, George Stephen, G. I. T. Stewart, George F. Thomson, Norman J Townsend, Robert S. Trotter, Thomas D. Webster, and James S. Wilson.

The first portion of the Third Professional Examination (new regulations) has been passed by—

Peter M'Kessack.

The Third Professional Examination (new regulations) has been passed "with credit" by—

Robert G. Henderson.

The following students gained gold medals in the Faculty of Medicine in the Winter Session 1894–95:—

Fife Jamieson Memorial Gold Medal in Anatomy: Thomas W. Lumsden, Midmar, and Joseph Pozzi, M.A., Mintlaw, equal. Keith Gold Medal for Systematic and Clinical Surgery: John S. Milne, M.A., King Edward. Shepherd Memorial Gold Medal for Systematic and Practical Surgery: W. A. Irvine-Fortescue, Aberdeen. Matthews Duncan Gold Medal in Obstetrics: Arthur H. Lister, B.A., Leytonstone, Essex. Dr. James Anderson Gold Medal in Clinical Medicine: Alexander Robb, M.A., Peterhead.

FOREIGN UNIVERSITY INTELLIGENCE. — *Cadiz:* Dr. P. Ramon y Cajal has been appointed Professor of Histology.—*Freiburg:* Dr. Goldmann has been promoted to an Extraordinary Professorship of Surgery, and Dr. E. Jacobi to an Extraordinary Professorship of Dermatology. — *Prague (German University):* Dr. W. Czermak of Innsbrück has been appointed to the chair of Ophthalmology in succession to Dr. Schnabel.—*Vienna:* Dr. Julius Schnitzler has been recognised as *privat-docent* in Surgery.

HER Royal Highness Princess Mary Adelaide, Duchess of Teck, is to be present at the annual meeting of the Factory Girls' Country Holiday Fund on Monday, April 29th. By the kind permission of the Master and Wardens of the Haberdashers' Company the meeting will be held at their Hall in Gresham-street. Alderman Sir David Evans, K.C.M.G., who will preside, will be supported by the Archdeacon of London, the Rev. and Hon. J. G. Adderley, Mrs. Garrett Anderson, M.D., Lady Frances Balfour, Sir Gainsford Bruce, and others.

FOOTBALL CASUALTIES.—On the 12th inst., at Shipley, in a match between the Shipley and District teams, the Bradford wing three quarter back fractured the fibula of his left leg and was conveyed to the Bradford Infirmary.—On the 13th inst., at Northallerton, in a Richmondshire League match between the Northallerton Thistles and Northallerton Central teams, a player dislocated his ankle.—On the same day, at Redruth, during a match between the Plymouth and local teams, one of the visiting half-backs sustained concussion of the brain; and at Burnley, in a League match, two members of the Sunderland team received injuries—namely, the foot of the half-back and captain of the team was caught by an opponent, and the "sudden jerk twisted his leg, almost wrenching his kneecap off," while the other player dislocated his humerus. On the 15th inst., at Armley, in a game between the Burley and Stanningley Clubs, a player received a kick and was removed to the infirmary, but the injury was found to be only slight.

ROYAL METEOROLOGICAL SOCIETY.—At a meeting of this society held at the Surveyors' Institution on the 17th inst. Messrs. F. C. Bayard and W. Marriott communicated a paper on the Frost of January and February, 1895, over the British Isles. The cold period which commenced on Dec. 30th and terminated on March 5th was broken by a week's mild weather from Jan. 14th to 21st, otherwise there would have been continuous frost for sixty-six days. Temperatures below 10° F., and in some cases below zero, were recorded in parts of England and Scotland between Jan. 8th and 13th, while from the 26th to the 31st and from Feb. 5th to 20th temperatures below 10° occurred on every day in some part of the British Isles. The coldest days were Feb. 8th to 10th. The lowest temperatures recorded were – 17° at Braemar and – 11° at Buxton and Drumlanrig. The mean temperature of the British Isles for January was about 7°, and for February from 11° to 14° below the average, while the mean temperature for the period from Jan. 26th to Feb. 19th was from 14° to 20° below the average. The distribution of atmospheric pressure was almost entirely the reverse of the normal, the barometer being highest in the north and lowest in the south, the result being a continuance of strong northerly and easterly winds. The effect of the cold on the public health was very great, especially on young children and old people. The number of deaths in London due to diseases of the respiratory organs rapidly increased from Feb. 2nd to March 2nd, when the weekly number was 1448, or 945 above the average. Rivers and lakes were frozen, the ice being more than ten inches thick. The frost will long be remembered for its effect on the water-pipes all over the country, in many cases householders being without water for more than nine weeks. As the result of inquiries Messrs. Bayard and Marriott find that mains have frozen which have been laid as low as 3 ft. 6 in. from the surface of the ground to the top of the pipe. It appears, however, that the nature of the soil had far more to do with the depth to which the frost penetrated than the intensity of the frost itself. From a comparison of previous records they are of opinion that the recent frost was more severe than any since 1814.

WIGAN MEDICAL SOCIETY.—An ordinary meeting of this society was held on April 11th, the President, Mr. Wm. Mitchell Roocroft, being in the chair. The President gave his address and read a paper on a Plea for Early and Thorough Excision of the Breast for Cancer. After going fully into the pathological histology of breast cancer he pointed out how necessary it was to remove the breast with all the diseased tissues and glands if recurrence of the disease is to be prevented. A vote of thanks was accorded to the President for his able and valuable address, on the motion of Dr. R. Prosser White, seconded by Mr. E. H. Monks. The remainder of the time of the meeting was occupied in showing cases. Mr. Hugh E. Jones showed: (1) Double Optic Neuritis in a boy eleven years of age; (2) Inclusion Cyst of Eyeball. Mr. Lowe: (1) a case of Traumatic Atrophy of Upper Extremities and Scapular Muscles in a male adult; (2) Erb's Paralysis in a youth aged eighteen years. Mr. Hardman: (1) a case of Scorbutus in a girl aged seven years; (2) a specimen of Ileocolic Intussusception. Dr. R. Prosser White: a case of Purpura. Mr. Berry (hon. sec.): a case of Double Osteotomy performed six months ago.

HUNTERIAN SOCIETY.—An ordinary clinical meeting was held on April 10th, at the London Institution, Mr. Charters J. Symonds, President, being in the chair. Dr. Arnold Chaplin showed a case of Transposition of the Viscera in a healthy girl aged nine. Dr. Galloway showed three cases of Skin Disease: (1) Lichen Planus diffused over the body and limbs of a man aged twenty-eight; (2) the same disease localised about the knees and thighs of a woman; (3) a case of skin disease affecting almost, but not quite, exclusively the limbs of a child aged two years and a quarter, closely resembling lichen planus, but actually caused, Dr. Galloway thought, either by drugs or a micrococcus. Dr. F. J. Smith, Mr. Cotman, and Dr. Chaplin spoke on the cases. Mr. Openshaw showed the following cases: (1) Webbed Fingers (total) in the Left Hand of a little Child, with Partial similar Deformity in the Other Hand; (2) an Enormous Nævus in the Cheek of a Boy aged about twelve, growing since infancy and involving the Palate as well; (3) Double Cephalhæmatoma in a Child four weeks old; (4) and (5) two cases of Trephining for Cerebral Abscess, one on either side of the Brain; (6) a case presenting almost identical symptoms to 4 and 5, leading Dr. Hughlings Jackson to diagnose Cerebral Abscess, but the patient gradually got well without any operation. Mr. Cotman showed a case of Intermittent Pulse in a man aged seventy-three; the condition was apparently quite physiological.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Easter Recess.

THE two Houses of Parliament are in recess. The House of Lords adjourned on Tuesday, April 9th, and the House of Commons a day after, and both will resume on Monday, April 22nd.

The Case of Dr. M. J. Calahan.

Mr. William Redmond has given notice that on the day the House resumes he will direct the attention of the Chief Secretary to the Lord Lieutenant of Ireland to the case of this gentleman who after receiving an appointment from the Nenagh Board of Guardians and Dispensary Committee was subject to certain injurious treatment by the Local Government Board.

The Fisheries Bill.

When this Bill comes on for second reading Mr. T. R. Buchanan, many of whose constituents are deeply interested in the matter, will bring forward a motion calling upon the Government to introduce provisions with regard to the regulation of trawling.

Institutions for Idiots.

A Bill has been introduced into the House of Commons to exempt from poor and other local rates all registered institutions for the care, training, and education of idiots and imbeciles. The Bill is backed by Mr. Round, Mr. Ainsworth, Sir Frederick Mappin, Mr. Maclure, Mr. Tomlinson, Mr. Allison, and Sir William Houldsworth, and has been put down for second reading on Monday, May 6th.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

ADOLPHUS, J. F. P., M.R.C.S., has been appointed Resident Medical Officer at the Camberwell New Workhouse.

ARKLE, C. J., M.D., M.R.C.P., has been appointed Assistant Physician to the Charing-cross Hospital.

BAMBER, H., M.B., C.M. Glasg., has been appointed Medical Officer for the Tynemouth Sanitary District of the Tynemouth Union.

BOND, F. T., M.D. Lond., M.R.C.S., has been reappointed Medical Officer of Health for the Gloucester Combined Sanitary Districts.

CAPPE, H. N., L.R.C.P. Lond., M.R.C.S., has been appointed Junior Medical Officer to the Brookwood Asylum, Woking, vice Shepherd, resigned.

CHIDLEY, T. J., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Clinical Assistant to the Richmond District Lunatic Asylum, Dublin.

DAVIES, W. T., L.R.C.P. Lond., M.R.C.S., has been appointed a District Medical Officer for the Llandilofawr Union.

DUGGAN, MOTHERWELL, M.R.C.S., L.R.C.P., L.M. Edin., has been appointed Medical Officer of Health to the Bowdon Rural Sanitary District.

EVANS, F. W., M.D., C.M. Aberd., M.R.C.S., has been appointed Honorary Assistant Physician to the Monmouthshire and South Wales Infirmary.

EVANS, WM. O., L.R.C.P., L.M., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer of Health and District Medical Officer and Public Vaccinator for the Buckley Sanitary District of the Hawarden Union.

FINCH, H. J., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Assistant House Surgeon to the Royal Surrey County Hospital, Guildford.

FLEMMING, C. E. S., M.R.C.S., has been reappointed Medical Officer for the Eighth Sanitary District of the Bath Union.

GRIFFITHS, P. R., M.B., B.S. Lond., M.R.C.S., has been appointed Honorary Assistant Surgeon to the Monmouthshire and South Wales Infirmary.

GUY, WILLIAM, F.R.C.S., L.R.C.P., L.D.S. Edin., has been appointed Dental Surgeon to the Royal Infirmary, Edinburgh.

LEA, ARNOLD W. W., M.D., B.S. Lond., F.R.C.S. Eng., has been appointed Assistant Lecturer on Obstetrics and Gynæcology to the Owens College, Manchester.

MAIDLOW, W. H., M.B. Durh., L.R.C.P. Lond., F.R.C.S., has been appointed House Surgeon to the Taunton and Somerset Hospital, vice Bain, resigned.

MILNER, CYRIL W., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Junior House Surgeon to the Nottingham Dispensary.

PATERSON, J., M.B., M.S. Glasg., has been appointed Medical Officer for the Berriew Sanitary District of the Forden Union, vice Morgan.

REDINGTON, J. M., L.R.C.S., L.M., L.R.C.P. Irel., has been appointed *pro tem.* Assistant Medical Officer to the Richmond District Lunatic Asylum, Dublin.

SMYTH, E. J., M.B., B.S., B.Sc. Lond., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer to the Birmingham Workhouse Infirmary.

SQUIRE, E. H., M.R.C.S., has been appointed Medical Officer for the Second Sanitary District of the Lexden and Winstree Union.

TAYLOR, H. S., M.R.C.S., L.R.C.P., has been appointed Junior House Surgeon to the Clayton Hospital, Wakefield, vice Hutley, resigned.

VACHELL, H. R., M.D., C.M. Aberd., M.R.C.S., has been appointed Honorary Assistant Physician to the Monmouthshire and South Wales Infirmary.

VERNON, H. H., M.D., F.R.S. Edin., M.R.C.S., L.M., has been appointed Medical Officer of Health for the Southport Urban Sanitary District.

WATERFIELD, R., L.R.C.P., L.M., L.R.C.S. Irel., has been appointed Clinical Assistant to the Richmond District Lunatic Asylum, Dublin.

WILSON, R. M., M.D., B.Ch. Dub., has been appointed Honorary Medical Officer to the Derbyshire Hospital for Sick Children, vice Wright, resigned.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM CITY ASYLUM.—Resident qualified Clinical Assistant. Board and apartments provided.

BRADFORD INFIRMARY.—Dispensary Surgeon, unmarried. Salary £100 per annum, with board and residence.

BRADFORD INFIRMARY AND DISPENSARY.—Junior House Surgeon, unmarried. Salary £50 per annum, with board and residence.

CHARING-CROSS HOSPITAL, London, W.C.—Curator and Pathologist. Salary £100 per annum.

CHELSEA.—Temporary Assistant Medical Officer for the Workhouse and Infirmary. Salary at the rate of £120 a year, with furnished apartments, rations, washing, coals, and gas, and an allowance of £2 7*s.* 6*d.* for the period in lieu of beer. Applications to the Clerk to the Guardians, 250, King's-road, Chelsea.

CONVALESCENT HOSPITAL AND SEA-BATHING INFIRMARY, Southport.—Resident Medical Officer. Salary to commence at £150 per annum, with board, lodging, and washing.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury, W.C.—Surgical Registrar, for one year. Honorarium of £40 at the expiration of that term.—Anæsthetist, for one year. Honorarium of £15 15*s.* will be voted at the expiration of that term.—Medical Officer as House Physician for six months; unmarried. Salary £20, with board and residence in the hospital.—Resident Medical Officer as House Surgeon for six months; unmarried. Salary £20, with board and residence in the hospital.

LIVERPOOL STANLEY HOSPITAL.—Senior House Surgeon. Salary £80, with board, &c.

MIDDLESEX HOSPITAL, W.—Assistant Surgeon.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Albany Memorial, Queen-square, London, W.C.—Registrar for two years. An annual honorarium of 50 guineas attaches to the office.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART AND PARALYSIS, 32, Soho-square, London, W.—Resident Medical Officer for six months. An honorarium of £10 10*s.*, with board, residence, and washing.

PARISH OF ST. MATTHEW, Bethnal-green.—A male Second Assistant Medical Officer for the Workhouse at Waterloo-road, E., for six months. Salary £40 per annum, with rations, furnished apartments, and washing. Applications to the Clerk, Guardians' Offices, Bishop's-road, E.

PLYMOUTH BOROUGH ASYLUM, Ivy-bridge, Devon.—Locum Tenens, Medical, for four weeks. Terms, £3 3*s.* per week, with board and lodging.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House Surgeon for six months. £10 will be given at the end of that period if found satisfactory. Board and lodging provided.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, E.C.—Resident Medical Officer, for six months. Salary at the rate of £100 per annum, with furnished apartments and board.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant, for six months. Board and residence provided.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL, Albert Embankment, London, S.E.—Lecturer on Physiology.

UNIVERSITY OF GLASGOW.—Two Examiners. The appointment will in each case last till Dec. 31st, 1896, at the rate of £50 annually.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—Medical Officer to the Provident Dispensary attached to the Hospital. Salary £80 per annum, with board, lodging, and washing.

Births, Marriages, and Deaths.

BIRTHS.

BURD.—On April 8th, at Okehampton, the wife of George V. Burd, Surgeon, of a daughter.

DUKA.—On April 11th, at Jasper House, Wetherby-road, S.W., the wife of Albert Duka, M.A., M.R.C.S., &c., of a son.

GWYTHER.—On April 11th, at Upper Woburn-place, Tavistock-square, the wife of James Gwyther, M.B., of a daughter.

HENDERSON.—On April 6th, at Via Cavour, Florence, Italy, the wife of Thomas Henderson, M.B., C.M., M.D., of a son.

MARRIAGES.

HEBBLETHWAITE—BARNARD.—On April 18th, at the Parish Church, Owston, Lincolnshire, by the Rev. H. E. Clarke, Vicar, assisted by the Rev. Canon Andrews, Vicar of Saxilby, assisted by the Rev. J. Pettifore, Alfred George Hebblethwaite, M.R.C.S. Eng., L.R.C.P. Lond., of Devonshire-street, Keighley, eldest son of George Hirst Hebblethwaite, Esq., of Westroyd Mirfield, to Annie Blackburn, third daughter of John Barnard, Esq., C.C., of Hemdyke House, Owston Ferry.

LONGTON—PONTIFEX.—On April 15th, at the Consulate, Pau, France, George Harold Longton, M.R.C.S., L.R.C.P., youngest son of Dr. Longton, J.P., The Priory, Southport, to Ella Constance Clara, fourth daughter of Major W. Pontifex, of Chilworth Manor, Guildford.

MOYNIHAM—JESSOP.—On April 17th, at the Parish Church, Leeds, by the Rev. Canon Stratten, Vicar of St. Paul's, Leeds, assisted by the Rev. R. Spencer Gough, Rector of Barmingham, the Rev. Arthur Needham Claye, Vicar of Brigg, and the Rev. A. R. Light, Curate of St. Michael's, Headingley, Berkeley George Andrew Moyniham, M.S. Lond., F.R.C.S., of 5, Woodhouse-square and 33, Park-square, Leeds, only son of the late Captain Moyniham, V.C., 8th (King's) Regiment, to Isabella Wellesley, second daughter of Thos. Richard Jessop, F.R.C.S., of Rounday Mount and 32, Park-square, Leeds.

OLIVE—PRICE.—On April 16th, at Christ Church, Leeson-park, Dublin, by the Rev. Canon Neligan, D.D., Eustace John Parke Olive, M.A., M.D. Cantab., F.R.C.S. Eng., of Leamington, to Annie Gordon, eldest daughter of Rev. Wm. Guard Price, Knock, Belfast.

DEATHS.

FORSHAW.—On April 12th, at Smalley, Derby, Thurstan Forshaw, L.M. Dub. (1864), L.R.C.P. Ed., L.S.A. Lond. (1871), aged 55.

HENTY.—On April 11th, at his residence, Camden-road, N., George Henty, M.D., aged 77.

HOLMAN.—On Jan. 26th, on board the *Ganges*, William Holman, Surgeon, eldest son of Commander Robert Holman, R.N.

SKIPTON.—On April 14th, at his residence, Sweet Briars, Liscard, Cheshire, in his 66th year, Deputy-Surgeon-General (Retired) Samuel Stacy Skipton, M.D.

VINRACE.—On April 9th, at Bromford House, Six Ways, Birmingham, Selina Emelin, the beloved wife of John Vinrace, M.D. Interred at the cemetery, Barnes, S.W., April 17th.

WEBB.—On April 10th, at Kingsbridge, Devon, Florence Phœbe, the devoted wife of William Henry Webb, M.D., aged 45.

*N.B.—A fee of 5*s.* is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 18th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia. in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Apr'l 12	30·45	N.E.	45	43	98	58	40	...	Hazy
,, 13	30·25	S.E.	44	40	105	57	40	...	Bright
,, 14	30·35	N.E.	49	43	101	56	37	...	Cloudy
,, 15	30·18	N.E.	42	42	100	55	36	...	Overcast
,, 16	29·94	N.E.	41	40	88	58	39	...	Overcast
,, 17	29·73	N.E.	46	44	87	67	41	0·03	Overcast
,, 18	29·59	S.W.	51	50	75	57	46	0·04	Overcast

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynecological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Gt. Northern Central (2.30 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY.—MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Samuel West: Case of Pleuritic Effusion (Serous) of Eighteen Months' Duration; tapped forty times, and side then incised; ultimate complete recovery, with complete expansion of lung and little flattening of side.—Dr. Archibald Garrod: Case of Scleroma Neonatorum ending in Recovery.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-sq., W.).—Dr. Felix Semon: On the Probable Pathological Identity of the Various Forms of Acute Septic Inflammations of the Throat and Neck, hitherto described as Acute Œdema of the Larynx, Œdematous Laryngitis, Erysipelas of the Pharynx and Larynx, Phlegmon of the Pharynx and Larynx, and Angina Ludovici.

WEDNESDAY.—HUNTERIAN SOCIETY.—8.30 P.M. Mr. F. R. Humphreys: On the Desirability of Forming an Organisation with the view of Correcting the Grievances arising from the Abuse of Hospitals, Dispensaries, and Clubs.

FRIDAY.—CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Lucas Benham and Mr. Silcock: A case of Acute Intestinal Obstruction due to Volvulus of the Sigmoid; Abdominal Section; Recovery.—Mr. Golding-Bird: Cases of Early Erasion in Inflammation of the Sacro-iliac Joint.—Mr. Mansell Moullin: Two cases in which Orchotomy was performed for Enlargement of the Prostate.—Mr. Bowlby: A case of a Large Intra-thoracic Cystic Goitre causing Dyspnœa and treated by Operation.—Mr. Arbuthnot Lane: A case of Extensive Degenerating Nævus of the Bladder.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY.—SOCIETY OF ARTS.—8 P.M. Mr. James Douglas: Recent American Methods and Appliances employed in the Metallurgy of Copper, Lead, Gold, and Silver.

TUESDAY.—ROYAL INSTITUTION.—3 P.M. Prof. George Forbes: Alternating and Interrupted Electric Currents (I.).

GRESHAM COLLEGE.—6 P.M. Dr. Symes Thompson: The Climate of Egypt and Sea Voyages. (First Gresham Lecture.)

SOCIETY OF ARTS.—8 P.M. Mr. Wm. Gowland: Art of Casting Bronze in Japan.

WEDNESDAY.—GRESHAM COLLEGE.—6 P.M. Dr. Symes Thompson: The Climate of Egypt and Sea Voyages. (Second Gresham Lecture.)

SOCIETY OF ARTS.—8 P.M. Mr. R. E. Crompton: The Use of Electricity for Cooking and Heating.

THURSDAY.—ROYAL INSTITUTION.—3 P.M. Prof. Dewar: The Liquefaction of Gases (I.).

GRESHAM COLLEGE.—6 P.M. Dr. Symes Thompson: The Climate of Egypt and Sea Voyages. (Third Gresham Lecture.)

SOCIETY OF ARTS.—4.30 P.M. Mr. J. W. Parry: The Coming Railways of India and their Prospects.

FRIDAY.—GRESHAM COLLEGE.—6 P.M. Dr. Symes Thompson: The Climate of Egypt and Sea Voyages. (Fourth Gresham Lecture.)

ROYAL INSTITUTION.—9 P.M. Mr. John Hopkinson: The Effects of Electric Currents in Iron on its Magnetisation.

SATURDAY.—ROYAL INSTITUTION.—3 P.M. Mr. Arnold Dolmetsch: English Music and Musical Instruments of the 16th, 17th, and 18th Centuries (with illustrations upon original instruments). (I.)

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

UNDER no circumstances do the Proprietors authorise the insertion of loose advertisement circulars and handbills in THE LANCET. Any such announcements are inserted by the newsagents, whom the Proprietors cannot control. At the same time, the Manager will be glad if readers will send him copies of any circulars, with the name and address of the agent through whom they obtain THE LANCET, and the Manager will then endeavour to mitigate the nuisance.

QUACKERY.

To the Editors of THE LANCET.

SIRS,—The following account of quackery rampant in the West of England may interest some of your readers, although I fear it is by no means unique.

There lives in a neighbouring town a herbalist and "cancer curer," who pays us periodical visits here and swindles the people with an impudence and impunity scarcely credible to anyone unacquainted with the gullibility of the public in all matters medical. One market-day in the present month he stood with his vehicle in the market-place here. By his side was a girl he professed to have cured. She had been a club patient of mine, and endorsed all his statements—I daresay in perfect good faith. He went on to say that this girl had been under my care for many months (mentioning me by name), and under that of another medical man, and had received no benefit whatever, kindly remarking that he did not wish to say anything against us, but that "doctors do not understand these cases." He, on being consulted, at once saw it was a cancer and cured her. He then drew attention to the supposititious "cancer" contained in a bottle hanging at the side of his cart. The above account has been given to me by credible witnesses present in the crowd. Now for the real facts of the case. This young woman was under my care for some time suffering from scrofulous disease at the lower third of the femur, several pieces of bone coming away. She then went into hospital for a considerable time, and on her return continued under my care until the sinus was healed, some thickening of the soft tissues remaining. For this she seems to have consulted the herbalist, who gave her some very irritating ointment, which she was to rub in daily, and which, he said, would bring away a lump, which she was to bring to him. Of course, the ointment produced a slough, which in due time separated, and was transferred to the bottle and dignified by the name of "cancer," and the girl will go to her deathbed firmly believing she has been cured of a cancer which never existed. He then told the people that for this case he had received only thanks, but that for future cases he should charge £10—£5 to be paid down and £5 on completion of the cure.

This is not the only case that has come under my immediate observation. In November last I received a message from another patient, a married man, saying that he was in intense pain and, it was feared, would be dead before I could arrive. I found him with all the symptoms of irritant poisoning, and his mother gave me the following information. Three weeks before this time he had consulted the herbalist, who informed him that he was suffering from the inevitable tapeworm, and gave him a draught and a powder, for which he charged ten shillings, instructing him to wait until "four days before the full of the moon," then fast for twenty-four hours, and finally mix them together and swallow the lot. He did so, and was rewarded by violent pain in the bowels, constantly vomiting, fifteen liquid stools,

ending in a state of collapse, the worm being conspicuous by its absence. The medicine bottle had been destroyed—whether as part of the spell or as a wise precaution in case of unpleasant results I know not. The patient continued under my care for four weeks, and, I believe, was afterwards treated as an out-patient at a hospital. I doubt whether it would be wise to advertise the fellow by taking any public cognisance of him or his doings. I have therefore only sent him a verbal message to the effect that he has very narrowly escaped a charge of manslaughter, and a caution not again to make free with my name. As he carefully avoids using any such title as "M.B." (Medical Botanist), &c., it is possible that he need not trouble himself about the law; but in that case what practical advantage have we from our long and expensive course of study? If a law to meet such cases exists, who is to put it in force? For my own part, of two evils I prefer the lesser, and do not propose to risk the loss of time and money and incur the worry incident to putting the law and its glorious uncertainty in motion.

I am, Sirs, yours faithfully,

March 26th, 1895. A TWENTY YEARS' SUBSCRIBER.

TREATMENT OF DIPHTHERIA BY SULPHITE OF MAGNESIUM.

To the Editors of THE LANCET.

SIRS,—Since the treatment was brought forward in your columns by Dr. Brownlow Martin some eighteen months ago I have adopted it in all the cases of diphtheria that have come under my care, and have followed, as far as I could, the general indications given for its application—viz., frequent insufflations, tabloids, and a gargle occasionally; and herewith I give a short summary of the results obtained from ten cases of undoubted diphtheria. Of those ten there were two deaths and eight recoveries. The first, a baby fifteen months old, died five hours after it was first seen, and in its case any treatment whatever would have been unavailing. The second, aged thirty-two years, died after six days' illness from pure asthenia, went steadily down, and succumbed from an overdose of diphtheritic poison, notwithstanding a literal deluge of sulphite.

Of the recoveries six ran a course varying from fourteen to twenty-eight days, counting from the appearance to the disappearance of the last trace of membrane, each exhibiting throughout that period the usual and characteristic intermissions and exacerbations so peculiar to diphtheria, and the onset of each recurrence of symptoms coinciding with a re-formation or extension of the membrane, and the intermissions or subsidence of symptoms with successive separations. As an illustration of this, the most usual course, let me give briefly the case of a girl aged six years. I was called to see her on Jan. 30th, 1895, and found the temperature 103° F., with a patch on the right tonsil, &c. I at once gave instructions that the sulphite powder be applied once every hour during the day, and twice during the course of the night; a supply of tabloids was given, and also a mouth wash of the sulphite supplied by way of variation. She was a docile and obedient child, and submitted patiently to the treatment in all its details, which I knew were rigorously carried out. By Feb. 2nd all general symptoms had subsided and the temperature was normal, with only a small speck on the right tonsil. Although the tongue was still dirty and coated, we began to hope that her recovery would prove permanent. In this, however, we were disappointed, because by Feb. 3rd a fresh onset occurred irrespectively of the most persistent exhibition of sulphite, and the temperature rose again to 103°, with now a patch on the left tonsil. By Feb. 5th again both tonsils were clear of membrane, and all the symptoms had again subsided. These alternate subsidences and recurrences continued, the diphtheritic membrane invading successively the soft palate, the left side of the uvula, and ultimately the posterior nares; and the last of the membrane was coughed up on Feb. 20th, the tongue began to clear, and convalescence thenceforward was uninterrupted. In the remaining two cases no recurrences or relapses took place, the patch disappearing twenty-four hours after the treatment was begun. As regards sequelæ, a man aged twenty-eight years, one of the six cases, suffered from exceptionally severe paralytic sequelæ, so that at one time his life was very much despaired of. Beginning with paralysis of the soft palate and dysphagia, there followed presbyopia, paralyses and pareses involving the lower limbs, upper limbs, the abdominal and thoracic muscles, and ultimately the sphincters were temporarily implicated too.

I offer no remarks on the results of this treatment. Every case had sulphite powder freely and frequently applied; still my colleague has a record quite as successful with boracic acid and glycerine applications. In my hands I cannot see that the course of the disease has been materially shortened or modified, the majority relapsing under its most persistent administration. That it exerts some influence on the membrane I am prepared to admit; but from former experiences of diphtheria I should like to draw attention to the important and often very misleading feature—viz., that the membrane of diphtheria, quite irrespectively of treatment, seems to be shed or to separate spontaneously after some thirty-six or forty-eight hours from its appearance, re-forming again rapidly and repeatedly—of course, in bad cases. In estimating, therefore, the potency of any treatment this fact must be clearly borne in mind. In conclusion, I regret to have to admit that my confidence and reliance on this sulphite treatment grow less, and if pharyngeal cases can only be overcome or checked after on an average three weeks' continuous treatment, what success can we be assured of in dealing with laryngeal cases?

I am, Sirs, yours faithfully,

April 15th, 1895. JOHN SUTHERLAND, M.B., B.Sc. Edin.

AN APPEAL.

WE gladly give publicity to the following appeal:—

"A lady, the daughter of a medical man, has supported herself for the last twenty-five years by teaching; but ill-health has prevented her from continuing to gain a livelihood by this means. She has since started a boarding-house, and is urgently in need of help. Debts to the amount of £150 have been incurred, and her furniture is likely to be taken, and thus her last means of carrying on a home, which is just beginning to maintain her, will be lost. Will any member of the profession assist? Any subscriptions will be received and duly acknowledged by J. Blake Maurice, M.D., F.R.C.S., Lloran House, Marlborough."

"MEDICAL ADVERTISING AT NOTTING HILL AND THE METROPOLITAN PROVIDENT MEDICAL ASSOCIATION."

To the Editors of THE LANCET.

SIRS,—In your issue of the 13th inst. you call attention to a circular referring to the Notting Hill Dispensary and the Metropolitan Provident Medical Association. Will you kindly allow me to state the facts of the case?

The Notting Hill Provident Dispensary—an institution of more than thirty years' standing—has recently been transferred to this association to be carried on as one of its branches. In connexion with the reorganisation of the dispensary a new medical staff has been appointed, and changes made in the hours of attendance, scale of payments &c. The circular to which you refer was drawn up to inform the existing members of the dispensary of these alterations. It was intended only for them, and was not printed with a view of being distributed broadcast, as your note seems to imply. Owing to a misunderstanding, which I much regret, and for which the medical men were in no way responsible, a few copies were given to persons who were not members of the dispensary. I may say that only 500 were printed, and many are still on hand. It is quite contrary to the principles of this association to issue circulars or handbills for general distribution, containing the names of the medical men; and in this case the gentlemen mentioned had no knowledge whatever that the circulars were being given to anyone but members. I enclose a list of our council &c., from which you will see that the association would not be likely to countenance unprofessional advertising by or for the medical men attached to its various branch dispensaries.

I am, Sirs, yours faithfully,

CHAS. H. WARREN,
Secretary, Metropolitan Provident Medical Association.

Lamb's Conduit-street, W.C., April 16th, 1895.

To the Editors of THE LANCET.

SIRS,—Referring to a statement appearing in your issue of the 13th inst. concerning the Notting Hill Branch of the Metropolitan Provident Medical Association, we beg you to insert the following reply from us.

We emphatically disapprove of such a method as you allege has been adopted in advertising this institution, and are much pained and annoyed at the publicity which has been given to our names; we have never authorised any such circular to be "scattered broadcast." We have written to the secretary of the Metropolitan Provident Association for an explanation, and we find your informant has grossly misrepresented the facts. We think before giving such publicity to a false report which casts an ethical slur on two members of the profession you should have exercised a little more care.

It is unnecessary for us to defend the Metropolitan Provident Medical Association. We have asked the secretary to forward you their annual report. We believe it to be a genuine provident institution. Amongst the members of the council are Sir Spencer Wells, Sir Sidney Waterlow, Mr. Timothy Holmes, and many other well-known philanthropists. It receives grants from the Hospital Sunday Fund, the Drapers' Company, the Goldsmiths' Company, the trustees of the London Parochial Charities, &c. It is a philanthropic institution, and we shall take care that so long as our names are associated with the Notting Hill branch the rules and objects of the association shall be adhered to.

We are, Sirs, your obedient servants,

G. MALLACK BLUETT, 11, Addison-terrace, W.

April 16th, 1895. HENRY PILLOW, 1, Pembridge-gardens, W.

*** We have also had the pleasure of an interview with Dr. Pillow, who assures us that the circular in question has not, so far as either he or Mr. Bluett is aware, been scattered broadcast or placed either under the door or in the letter-box of houses in the neighbourhood, and that he has caused careful inquiries to be made and can find no evidence whatever of such a practice having been carried out. We have pleasure in publishing the above letters and in accepting the assurance of Dr. Pillow and Mr. Bluett that they emphatically disapprove of such a method as was alleged to have been adopted. At the same time, we wish to express our regret that they have suffered pain and annoyance. There must always be risks of misconstruction when the private addresses as well as the names of practitioners appear on circulars whose destination is probably left in the hands of lay officials. Would it not be feasible in the case of such an institution as the Metropolitan Provident Medical Association to arrange some other means by which the actual members of the association could be made acquainted with the address of the medical officer whose services they wished to secure? It seems a little hard that honourable members of the profession should have to suffer misconstruction of their motives from such a cause.—ED. L.

MEDICAL SCHOOLS AND MEDICAL ADVERTISEMENT.

WHEN so much attention is being given to the system of medical advertising and to the evils which it entails it would be unfair to restrict our criticisms to those advertisements which are direct and decidedly vulgar. Advertising must be taken in a larger sense and must be held to include all undue obtrusion of one's name, fame, or faculty before a newspaper public. This may be done in many indirect ways. Over some of these the medical practitioner may have little control. But wherever he has control it is his duty to be firm in its exercise, and to forbid the publication of his name. There are many cases in which medical men allow their names to appear from mere inadvertence, and others with regard to which they are, as a letter which we publish this week shows, never consulted till they see them published. Our attention has been directed to the advertisement of the names of the medical staff of a metropolitan school. We are asked if this is professional. Our answer is that such particulars are out of place in the lay press. The general arrangements of the school, fees, and so on may be advertised in this way, but the names of leading physicians, and surgeons, and accoucheurs are unnecessary and unseemly.

Surgeon-Captain C. H. Hale.—1. Full information can be obtained in Laveran's "Thesis on Paludism" and the Monographs of Marchiafava and Celli, translations of which are among the recent publications of the New Sydenham Society.—2. Baker, Holborn.

"DRUGS CONTRA-INDICATED IN PREGNANCY."

To the Editors of THE LANCET.

SIRS,—Your Paris correspondent in THE LANCET of March 9th conveys to us the opinion of M. Huguenin that "at the head of drugs dangerous to the pregnant woman must be placed the sodium salicylate, ergot of rye, salicylic acid, and salol." If in your judgment this view is debatable, I beg to submit as *à propos* the following brief narrative:—

In THE LANCET of Feb. 7th (p. 327) and July 11th (p. 75), 1891, notes are given by Dr. Finzi upon "white infarction" of the placenta as a cause of fœtal death, and of the opinions of Dr. W. L. Reid of Glasgow relative to the frequent occurrence of this condition in mothers evidencing a decidedly rheumatic history. Not long after these publications the writer was consulted by a fellow countrywoman as to her prospects of ever having a living child. She gave me to understand that her first parturition terminated (eighteen months before) in the birth of a stillborn and perfectly well-nourished male child, which had apparently been dead for several days, during which period she had felt no fœtal movements, though previously actively maintained. From the statements of her husband, an intelligent eye-witness of all that occurred, and those of the nurse, I gathered that there had been disease of the placental structures of very decided character, and that it was the opinion of the expert accoucheur in attendance that this condition had been fatal to the infant. Upon interrogation I learned that the parents of my patient had both died from diseases incidental to the cardiac affections following acute rheumatism, and that she was herself subject to subacute attacks of it. Her urine, examined periodically, showed a constantly high specific gravity (1030 to 1036) and great excess of uric acid. My plan proposed included the continuous exhibition of salicylate of soda, salicylate of quinine, or salol p.r.n., with labour to be artificially induced soon after the termination of the eighth month. Upon the occurrence of pregnancy soon afterwards, the date of which could be accurately known, I communicated my plan of procedure to Dr. W. L. Reid of Glasgow, and was fortunate enough to secure his approval "under all the circumstances." As a result the patient passed on in due course, seldom a week going by without daily doses of the remedies indicated, the urine maintaining a specific gravity of 1020 or lower, with greatly lessened acidity, and the general condition, after the early distress of nausea, "quite as good as could be expected," to use her own terms of description. Labour was induced (by the introduction of a bougie) on the date and day proposed six months before, and was terminated naturally by the birth of a living and perfectly nourished female child, which weighed over seven pounds. The placenta was not markedly abnormal, though there might be a suspicion of degeneration commencing on the maternal surface opposite the insertion of the funis, and at points upon its extreme margin. My patient had a perfectly healthy convalescence, nursed her daughter adequately and with much satisfaction to herself for more than six months, when a recurrence of menses, with concomitant symptoms, led to the adoption of artificial regimen. The infant at eight months weighs about sixteen pounds and has had scarcely an hour's illness.

Your obedient servant,

April 15th, 1895. AN AMERICAN PHYSICIAN.

"A QUERY."

To the Editors of THE LANCET.

SIRS,—At page 909 of your issue of April 6th, in reply to a query in reference to insurance against accident and sickness for medical men, you state that the Medical Sickness Annuity and Life Assurance Society "covers the sickness risk." This implies that accidents are not provided for. Would you, therefore, kindly amend your reply by stating that this society insures against accident as well as sickness?

I am, Sirs, yours faithfully,

F. DE HAVILLAND HALL,
Chairman, Medical Assurance Society.

Wimpole-street, W., April 15th, 1895.

THE CASE OF MR. C. B. TOWNSHEND.

THE following donations have been received in addition to those already announced and are hereby thankfully acknowledged:—

	£	s.	d.
Mr. W. Domett-Stone (London)	2	2	0
Mr. Henry J. Butlin	2	0	0
Dr. C. R. Walker (London)	1	1	0
Sir B. W. Richardson	1	1	0
Dr. Meredith Townsend	0	10	0
Mr. Herbert W. Page	3	3	0
Dr. Andrew Wynter (Beckenham)	0	10	0
Dr. Walter Edmunds (Lambeth)	2	2	0
Dr. Felix Semon	2	2	0
Dr. F. B. Lawson (Brighton)	0	5	0
Dr. Sharkey	2	2	0
Dr. T. Carter (Yorks)	1	0	0
Æsculapius Masonic Lodge 2410, per Dr. Thos. Dutton	2	2	0
Dr. Pearson (London)	1	1	0
Dr. T. Whipham (London)	1	1	0
W. M. K.	0	5	0
Mr. Geo. Lawson	5	0	0

Further donations are earnestly invited by the Rev. H. Townshend, 41, King Henry's-road, South Hampstead, N.W.

"MEDICAL PRACTICE BY TOUTING.—ADVERTISEMENT BY POSTER IN CAMBERWELL."

To the Editors of THE LANCET.

SIRS,—A friend of mine has just brought to my notice an article in your columns animadverting upon Dr. Gallie and his name appearing upon the bills of our mission slate club. I have already apologised to him for most unwittingly compromising him. May I add through your columns that such an impression as your correspondent notes would never have entered my mind, nor the minds of any of the slate club committee? Dr. Gallie was never consulted about the bill nor knew anything about its publication. The only reason his name appeared as it did was that it might help our men's guild slate club. We never dreamed that it would help him by advertising his name; nor do I think it would. If it is a breach of medical etiquette that the practitioner attending members of a slate club should allow his name thus to appear on a poster, then I repeat the deed was done before Dr. Gallie knew anything of it. I regret extremely that he should have been in any way thought to have committed any such breach of etiquette as your correspondent implies.—I am, Sirs, yours obediently,

April 13th, 1895. J. TETLEY ROWE, Trinity Missioner.

LANGLEY DEFENCE FUND.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow us through your columns to inform intending subscribers to the Langley Defence Fund that the subscription list is shortly to be closed? Since the first notice was published the following additional subscriptions have been received:—

	£	s.	d.
Dr. Clapton	2	2	0
Dr. Routh	2	2	0
Mr. Jollye	2	2	0
Dr. Gallie	1	1	0
Dr. Wharton Hood	1	1	0
Mr. Parrott	1	1	0
Dr. Reid	1	1	0
Mr. F. W. Smith	1	1	0
Smaller sums	2	0	6

As the amount hitherto subscribed falls far short of the sum that Mr. Langley has had to pay to his solicitors it is hoped that more may still be received. It will be remembered that the action for damages arising out of a midwifery case was dismissed with costs so soon as the evidence of Dr. Cullingworth and Dr. Herman had been heard, but that the plaintiff's pecuniary position was such that the entire costs fell upon the defendant. Either of us will be pleased to receive subscriptions.—We are, Sirs, yours faithfully,

W. RUMBOLL, 2, Surrey-square, S.E.
April, 1895. LAURISTON SHAW, 10, St. Thomas's-street, S.E.

OPHTHALMIA FOLLOWING INFLUENZA.

To the Editors of THE LANCET.

SIRS,—I have seen so many cases of ophthalmia following an attack of influenza during the recent epidemic that it seems certain there is a causal relation existing. That this should be so is not surprising, as the tendency of the disease is to affect mucous membranes. The conjunctivitis has been in all cases troublesome, lasting from one to two weeks, and requiring usually more than one change of treatment. The amount of muco-purulent discharge has been less than is commonly associated with catarrhal ophthalmia. The inflammation has affected both ocular and palpebral conjunctiva. In one case I have seen it complicated with phlyctenular disease of the margin of the cornea.

I am, Sirs, yours truly,

Rickmansworth, April 9th, 1895. H. W. WEBBER.

WANTED, A BED-REST.

To the Editors of THE LANCET.

SIRS,—Can any of your readers tell me which is the most useful and economical form of bed-rest?—I am, Sirs, yours truly,

April 15th, 1895. SUBSCRIBER.

During the week marked copies of the following newspapers have been received:—*Macclesfield Chronicle, Alloa Circular, New York Herald, Scotsman, Cornish Telegraph, Isle of Man Times, Ayrshire Post, Westmeath Examiner, Chorley Guardian, Ayr Observer, Northern Echo, Sheffield Independent, Devizes Gazette, North Devon Observer, Newcastle Journal, Glasgow Evening News, Whitehall Review, Manchester Guardian, Leicester Post, Brighton Argus, Wigan Examiner, Builder, Sussex Daily News, Birmingham Gazette, West Briton, Bury Guardian, Bath Journal, Brecknock Beacon, Kentish Express, Huddersfield Daily Chronicle, Yorkshire Herald, Architect, Times of India, Boston Independent, Cumberland Advertiser, Pioneer Mail, Brierley Hill Advertiser, Bristol Times, Derbyshire Courier, Bradford Observer, Kensington News, Southend Echo, Southport Visitor, Denbighshire Free Press, The Clerk of the Weather, Star, Johannesburg, Blackpool Herald, Poor-law Officers' Journal, Auckland Times, Norwich Mercury, Colchester Gazette,* &c. &c.

Communications, Letters &c. have been received from—

A.—Mr. H. E. Armstrong, Lond.; Mr. H. W. Allingham, Lond.; Messrs. T. & M. Armstrong, Lond.; Archives of Pediatrics, New York; *Answers*, Lond., Publishers of; A. B. C.; Dr. A., Lond.; Asterion; A. P., Lond.

B.—Dr. G. F. Blandford, Lond.; Dr. Lauder Brunton, Lond.; Dr. A. Brouner, Bradford; Dr. C. E. Baker, Lond.; Mr. C. Birchall, Liverpool; Mr. D. Biddle, Kingston-on-Thames; Mr. R. Bradley, Lancaster; Mr. H. A. Bryant, Durham; Messrs. Blondeau et Cie, Lond.; Messrs. Baker and Sons, Lond.; Birmingham City Asyl., Med. Supt. of; Brin's Oxygen Co., Lond.

C.—Dr. R. W. Carter, Weymouth; Prof. W. H. Corfield, Lond.; Brig.-Surg.-Lieut.-Colonel W. Hill Climo, Colchester; Mr. W. Cook, Birmingham; Mr. G. Cleghorn, Marlborough, N.Z.; Miss Candy, Lond.; Messrs. Cassell and Co., Lond.; Messrs. Crossley, Moir, and Co., Lond.; Messrs. J. A. Carveth and Co., Toronto; Cortland Wagon Co., Lond.; Commercial, Church, and Collegiate Agency, Lond.; Cymro, Lond.; Claret, Lond.

D.—Mr. H. N. Dixon, Northampton; Messrs. Domeier and Co., Lond.; Devonshire Hosp., Buxton, Chairman of; Delancey Fever Hosp., Sec. of; Delpha, Lond.

E.—Dr. F. H. Edgeworth, Bristol; Mr. T. C. Eager, Woking; Mr. J. Evans, Oswestry; Eureka Window Sash Fittings Co., Blackburn.

F.—Dr. J. E. Forster, Lond.; Mr. C. F. Forshaw, Bradford; Messrs. Fannin and Co., Dublin; Messrs. Forsaith, Lond.

G.—Mr. J. R. Gill, Kingsbridge; Mr. J. Greenway, Southport; Miss J. A. Galloway, Glasgow; Messrs. Galloway, Matthews, and Co., Lond.; Messrs. J. P. Gray and Son, Cambridge; Messrs. R. W. Green and Co., Lond.; Globe Advertising Co., Lond.; Gamma, Bath.

H.—Dr. E. Hawkins, Dudley; Dr. H. C. Highet, Singapore; Dr. S. Hyde, Buxton; Surg.-Capt. C. H. Hale, Fort Napier, Natal; Mr. J. Heywood, Manchester; Mr. T. G. Horder, Cardiff.

J.—Junior.

K.—Dr. W. Kidd, Lond.; Mr. P. J. Kavanagh, Long Sutton; Mr. R. C. B. Kerin, Lond.

L.—Dr. R. Lee, Lond.; Dr. A. Lorand, Vienna; Mr. B. Lord, Manchester; Messrs. Lee and Nightingale, Liverpool; Messrs. Langton, Eadon, and Co., Lond.; Lace Web Spring Mattress Co., Sandiacre; Liverpool Stanley Hosp., Sec. of; Liq. Carnis Co., Aston Clinton.

M.—Dr. M. Mackintosh, Lond.; Dr. E. J. Moure, Bordeaux; Mr. R. W. Marston, Berne; Mr. J. McC. McCarthy, St. George's; Messrs. Maw, Son, and Thompson, Lond.; Messrs. T. Meadows and Co., Liverpool; Messrs. Maple and Co., Lond.; Messrs. Milton and Co., Lond.; Messrs. Mather and Crowther, Lond.; Medico-Legal Congress, New York, Sec. of; Med. Congress, Eleventh International, Genea, Gen. Sec. of; M.B., Manchester, Marcus, Lond.; Maltine Manufg. Co., Lond.; Medicus, Lond.; M.B. (Lond.), London.

N.—Mr. E. N. Nason, Nuneaton; National Hosp. for Diseases of the Heart, Lond., Sec. of; National Hosp. for the Paralysed, Lond., Sec. of, North, Lond.

O.—Surg.-Lieut.-Col. J. O'Reilly, Guildford; Messrs. Oppenheimer, Son, and Co., Lond.; Oxford House Institute for Trained Nurses, Lond., Matron of.

P.—Mr. Y. J. Pentland, Edinburgh; Mr. J. B. Pike, Loughborough.

R.—Dr. G. Rankin, Warwick; Mr. J. T. Rowe, Lond.; Mr. Carl Ricker, St. Petersburg; Messrs. J. Richardson and Co., Leicester; Messrs. Robertson and Scott, Edinburgh; Royal Meteorological Society, Lond., Assistant Sec. of; Roxburgh Press, Lond.; R. C. P.

S.—Dr. J. Sutherland, Netherfield; Dr. E. Seaton, Lond.; Dr. J. Sarjant, Worthing; Dr. L. E. Shaw, Lond.; Dr. J. G. Swayne, Clifton; Mr. J. B. Smith, Lond.; Mr. P. R. W. de Santi, Lond.; Messrs. Simundt, Slater, and Co., Lond.; Messrs. H. Schweitzer and Co., Lond.; Messrs. G. Street and Co., Lond.; Messrs. Stubbs, Lond.; Messrs. Simpson, Roberts, and Co., Liverpool; Messrs. Souter, Mackenzie, and Co., Dover; St. Luke's Hosp., Sec. of; Salford Royal Hosp., Sec. of; Saarbach's News Exchange, Mainz; Sapiens, Lond.; Surgeon, Sheffield.

T.—Dr. A. Thom, Crieff, N.B.; Dr. B. M. Taylor, Greenburg, U.S.A.; Mr. J. Thin, Edinburgh; Miss L. Twining, Tunbridge Wells.

U.—University College, Bristol, Dean of.

V.—Mr. E. W. Von Tunzelmann, Chefoo.

W.—Dr. F. J. Waldo, Lond.; Mr. A. Walker, Rotheram; Mr. J. H. Wilson, Alfreton; Mr. A. Watts, Lond.; Weston-super-Mare Hosp., Sec. of.

Y.—Yorkshire Coll., Leeds, Sec. of; *Yorkshire Post*, Leeds, Propr. of; Young Wales, Lond.

Z.—Zenana Med. Coll., Lond., Asst. Sec. of.

Letters, each with enclosure, are also acknowledged from—

A.—Mr. W. Adams, Lond.; Mr. R. R. Anderson, Carmarthen; Aston Union, Clerk of; Alpha, Mile End; A. B. C. D., Lond.; A. H., Lond.; Akassa, Lond.; Æsculapius, Lond.

B.—Dr. R. Blair, Goole; Dr. T. M. Buncle, Arbroath; Dr. I. McW. Bourke, Lond.; Mr. G. S. Birt, Ipswich; Mr. J. S. Buck, Eaton Socon; Mrs. A. L. V. Balbirnie, Plumtree; Beta, Lond.

C.—Dr. W. R. Carter, Warwick; Mr. H. Case, Manchester; Mr. D. J. Carroll, Clonmel; Mr. A. Copen, Lond.; Mr. T. E. Cantillon, Little Island; Messrs. G. Curling and Co., Lond.; Chesterfield Hosp., Sec. of; C.C.C., Lond.

D.—Dr. W. H. Day, Lond.; Dr. A. A. Duke, Littlehampton; Rev. S. Douglas, Coatsbridge, N.B.; Señor D'Aranjo, Taipeng Penang; Mr. A. H. Dawes, Lond.; Messrs. Down Bros., Lond.; D. A., Lond.; Delta, Lond.; D. M., Lond.; D. M., Leeds.

E.—Mr. J. A. Eyton-Jones, Wrexham; Experienced, Lond.

F.—Fortis, Lond.; F. W. C., Lond.

G.—Mr. J. Greenway, Southport; Mr. C. J. Green, Preston; Mr. H. W. G. Green, Weymouth; Mr. J. H. Goldwin, Rochester; Gamma, Bath.

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